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Trade Commission Again Asked to Inquire Into Gasoline and Kerosene Prices

WASHINGTON, June 7

A DOUBLE-ORDERED investigation of the oil industry by the federal trade commission and a single-ordered inquiry into it by the Department of Commerce are to be started immediately.

President Coolidge and the senate have directed the trade commission to investigate because prices of crude oil, gasoline and kerosene have gone up. The senate did it by adoption on June 3 of the resolution offered by Senator Trammell of Florida in March, 1925.

The president, having power similar to that of the house and the senate to direct the trade body to make investigations, added his weight by means of a direct communication with the trade body. His requirements of Secretary Hoover is that the Department of Commerce advise him about the situation. Of course, the Department of Commerce cannot advise Coolidge unless it makes an inquiry of some sort.

The advance in the price of kerosene, seemingly, is what stirred Senator Trammell into activity more than the increase in the price of gasoline. His constituents wrote to him about it, on account of the 4.5 cents advance in the tank wagon price.

President Coolidge acted on a letter of request from Gov. Harry F. Byrd of Virginia.

The President does not expect much to be accomplished by the federal trade commission in the way of a reduction in prices. He asked the commission to look particularly into allegations of price control.

A spokesman for the president said the president held to that view.

May Bring Out Facts

NOTWITHSTANDING that view, it was believed the president granted Gov. Byrd's request for an investigation by the commission as something that might bring out facts that would satisfy Gov. Byrd and others that economic forces controlled prices of petroleum and its products, and not some combination of oil companies.

Ordering of an investigation by President Coolidge was not surprising when it is recalled that on another occasion he ordered the trade commission and the attorney general to investigate reports about anti-trust activities, which investigatons are going on.

The newest investigation, therefore, is to be piled on top of investigations and inquiries now proceeding with no excuse or reason other than that Gov. Byrd and some senators have not been industrious enough to keep informed about facts regarding production and consumption. That is the generous view. A less generous view is that they are willing to mislead their constituents into the belief that they are doing something for the relief of the down-trodden by wishing for lower gasoline and kerosene prices.

Test of Investigation

THE resolution under which the federal trade commission investigation will be made, follows:

"Resolved, That the federal trade commission be, and is hereby, directed to investigate and report to the senate at the next session of congress.

"First. The very material advances recently made in the price of crude oil, gasoline, kerosene, and other petroleum products, and whether or not such price increases were arbitrarily made and unwarranted.

"Second. Whether or not there has been any understanding or agreement between various oil companies or manipulations thereby to raise or depress prices, or any conditions of ownership or control of oil properties or of refining and marketing facilities in the industry which prevent effective competition.

"Third, The profits of the principal companies engaged in the producing, refining, and marketing of crude oil, gasoline, kerosene and other petroleum products during the years 1922, 1923, 1924, and 1925, and also such other matters as may have bearing upon the subjects covered by the provisions of this resolution."

Senator Harreld of Oklahoma is the only man who made any sort of fight against the adoption of the resolution. He hoped to convince the senators an investigation would be futile because the facts as to why the prices of oil go up and down, he said, were easily to be obtained by any senator for the mere asking. But he convinced them not at all.

"The oil industry has become one of the biggest organized businesses in the nation," the Oklahoma senator said. "I believe it is run on higher ethical grounds than any other business at present.

"The oil industry does not consist of the Standard Oil Co. and its branches. When we speak of the oil industry as a whole we mean to include, not only the Standard and its branches, but the great number of Independent producers as well. When I say the oil industry as a whole is well organized and that its business is conducted along ethical lines I mean by that the entire industry. There may be some companies, both Independent and Standard, which violate the ethics of the trade, but, generally speaking, we have an industry that is entitled to the consideration that a deliberative body such as this kind would give to any other industry of the same magnitude and importance.

"I am opposed to this investigation because it is futile. The oil business is the one business where the facts are easily obtainable. All the facts that will be obtained by the federal trade commission under this resolution may be had by any member of this body for the

simple asking. Therefore the resolution is futile."

Senator Harreld said he was going to put into the Congressional Record some of the facts about the production of crude, the output of gasoline and the range of prices that would be obtained by the federal trade commission.

Cited Previous Investigations

INCIDENTALLY, he said, he would put in the facts about the 13 investigations of the oil industry made in the last 10 years, six of which were made by the federal trade commission. He also pointed out that, in the 11 years of its life, that body had made 45 investigations at the behest of the senate, the house, or of the president, not one of which had resulted in anything other than the incurrence of an expense of $3,330,000 in addition to the ordinary cost of keeping up that body. Senator Wheeler tried to make a point at this stage of the speech that nothing was done because Attorney General Daugherty and Attorney General Sargent had refused to act, but Senator Harreld observed that neither Daugherty nor Sargent was attorney general in 1915 or any of the years prior to 1921.

Then uprose Senator McKellar of Tennessee to suggest there was an investigation of the oil industry by the Senate committee of manufactures a few years ago and that the effect of the investigation was to bring down the price of oil "very materially for quite a while."

Senator Harreld failed to sense that the Tennessee statesman was talking about the LaFollette investigation that ended in 1923, when the now departed senator talked about Dollar Gasoline, only to have the law of supply and demand come in to confute him and take the prices down to a disastrous level (for the industry) in the flood of crude in California. Harreld, by his answer, showed that he was thinking of things away back in 1911 when the Standard was dissolved and an era of higher prices followed that government victory.

This climax resulting in two orders to the federal trade commission came after Trammell, who had allowed his resolutions to sleep for more than a year with only occasional references to it, began making a pest of himself by "butting in" upon the regular order of business with suggestions that he would like a vote on his resolution. It was adopted June 3.

Pine Blocks Earlier Vote

THREE or four days before that action was taken Senator Pine of Oklahoma blocked an effort by the Florida senator to have the investigation resolution voted upon while the agricultural relief measure was the unfinished business. The Florida man asked unanimous consent for an immediate vote on his resolution. Senator Pine objected. He made no remarks on the subject because, while Trammell at that time said a few words, remarks were not in order. He said "I object" and the resolution went over until the next time. Trammell thought to bring it up which was on the day it was adopted.

Prior to that when the Florida senator tried to "horn in" with his resolution while some other business had the right of way, the senate voted down his proposal to take a vote on his resolution because to have done so would have displaced the bird refuge bill, a measure that had been the unfinished business for some time.

The actual vote on his resolution was 37 to 29. That, however, was not a vote on the "merits" of the resolution. Several senators told Trammell they had voted against his motion simply because they were opposed to departing from the order of doing business that had been agreed upon, such, for instance as Norris of Nebraska and McNary of Oregon. Shipstead of Minnesota voted for Trammell's motion and then said he would not have done so had he known that thereby he was imperilling the regular order of business.

Utterances, both before and after that record vote, clearly indicated that, freed from the complications about the regular order of business, the resolution would have been adopted because only three or four senators were willing to make a fight on the obviously good ground that the investigation would be a waste of money and a thrashing over of old straw thereby subjecting themselves to insinuations they were serving the Standard. Such an insinuation was made against senators who objected to his "butting in" on the regular order of business.

Rattle the Old Skeletons

ALL the things ever said in times past about the Standard, as to fixing of prices, inordinate profits and so forth, were used by Trammell, King of Utah and others who talked for the resolution. The writer has reported every one of them some time or another in the last 20 years. Not a new idea was advanced by the men who are being paid $10,000 a year to legislate for the country.

Any old oil story published in any on the Hearst or Scripps-Howard newspapers in the last 15 years would be a fair reproduction of the arguments made by Trammell, King or any other who talked for the resolution. Not one allegation that would stand up as testimony in a court was made by any of them.

Senator Harreld recited the facts about the price indexes prepared by the Department of Labor which show that the price indexes of oil since 1913 have been below the price indexes of 400 commodities embraced within the investigations of the department that prepares cost of living statistics. He gave the oil price analyses of writers for trade and financial papers upon which some part of the market depends, all going to show that present prices are based upon the economic fact which President Coolidge recognized, namely, that there have been no big discoveries of sources of crude in the last two years.

The Oklahoma senator did everything a man could be expected to do to show his colleagues they were again about to order a waste of the money of those whose interests they were supposed to foster and protect, suspecting it would inure to their political benefit.

There is only one bright spot in the whole matter. That is the fact that the federal trade commission now has a majority composed of hard-boiled men who believe and act upon the belief that what the welfare of the country demands is a close checking of allegations of wrong-doing and a plain verdict of not guilty when the thing insinuated is not proved.

Explain to the Public Promptly

By Warren C. Platt
Editor

THE oil industry is to be investigated again. The U. S. Senate has asked the Federal Trade Commission to investigate recent price advances in petroleum and also to see if there are agreements to restrict competition, etc., etc., etc.

It is the old story and the leaders of the oil industry have no one but themselves to blame, very largely. These leaders, one can well say, invited this investigation when they made their price advances this spring and didn't give the public a single word of explanation. The public is just as ignorant of any justification for these price advances today as of any price advance in previous years, even back 50 years ago.

What can the industry expect but an investigation, in view of all the racket which politicians have kicked up to their own profit over the petroleum industry? Why shouldn't a politician, or a numbskull radical, grab such a glorious opportunity to get his name mentioned in the Congressional Record and then in the newspapers as "taking steps" against "the oil trust?" You, Mr. Oil Man, would do it yourself if you were in his shoes.

If, Mr. Leading Oil Executive, the makers of line pipe tomorrow advanced their prices 10 per cent and you did not know the reason therefor and they didn't bother giving you any reason, and say they had been accustomed to doing it

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for 50 years, even though you had hit them over the head with a club many times, what would you do? You would get up on your hind legs and howl. You would hurl every brick handy at them. You would be mad and you wouldn't care whether you were inviting government into business or not, if you could hit the pipe makers through the government you would.

NOW can you blame men who make their living off of getting the public to vote for them, for not profiting by the present situation, which you, Mr. Oil Executive, have made for them just as skilfully as if you were making a new grade of gasoline.

The best, and in fact the only, public relations work that the oil industry can do that is worth the powder to blow it up, is—

First—See that every act of individual, company, and industry is so fair, square, honest, businesslike, economic, decent, respectable and all, that the industry is proud of it and can easily and willingly defend it to everyone.

Second—See that every act of the industry is at once explained so that it is thoroughly understood, to those that it affects. If it is a big customer, explain it to him; if it is the public, explain to the American people and do so intelligently and promptly.

Third—See that no one in high or low office, from the president of the United States down gets away for a single minute with any false or misleading or half-baked statements regarding any of these acts of the oil industry. Go to him at once and if he will not listen to the explanation and make public correction then go direct to those to whom the misstatements have been made with the facts and do so frankly, and promptly. And the willful and malicious liar, with many of whom the oil industry has had to contend, smash him squarely in the face every time he opens his mouth. Waste no time nor mercy on him.

If this is a respectable industry composed of honest men doing fair and honorable things, that is the kind of a program that should be carried out. It can be done with decency and with dignity but always with vigor. There need be no mud slinging.

These political personages who harpoon the oil industry do not try to be honest. They know from years of experience that the oil men will not fight back—that they will take it "lying down," as it were. They know that it is far easier to steal the oil industry's reputation than it is to go out and take a man's watch, and that it is not half so dangerous. The man, even though he be an oil man, will put up a real fight to keep his watch, and may even succeed in thrashing the daylights out of the thief. But the oil industry will not fight when its reputation is being stolen.

IF the McMasters and the Charlie Bryans and the rest of them, knew from the experience of other political mountebanks that the minute they said anything about the oil industry that was not the truth the whole truth and nothing but the truth, that they would be taken out in the street and given a good sound thrashing, and shown up to their constituents for what they really were, they would leave the oil industry severely alone.

These men have no personal feeling against the oil industry. McMaster had none. He was in a mighty tight hole in South Dakota, with a string of banks broken by the mismanagement of his political friends, his state was practically bankrupt and the whole mess was liable to come out before his constituents any minute.

He had to get out of the state quick. He looked around and saw a situation in the oil industry that he could capitalize on. He did it and he got out and left the mess to others to clean up, if it ever can be cleaned up. If the oil industry had brought him to time quick he would have dropped it and grabbed for something else because a fight would only have relayed his exit and possibly prevented it entirely. Why then should the oil industry hesitate for a minute in fighting such political carrion as that?

With all due respect to the excellent members and officers of the oil industry's committee on public relations, nothing much can come of any long time academical education of the public and the industry if the immediate issues as they come up are not met squarely. A five years' educational campaign of the greatest merit will be shattered by a couple of political attacks on some unexplained price advances, or some other single act or so of the oil industry. The public is not interested in a long rigamarole about the oil industry; it doesn't care to know all the details of what we are and what we do, PROVIDING the few things that happen in which the public thinks it is interested are satisfactorily explained to the public. Those few things are price changes—chiefly advances—and any radical change in seeming quality or characteristics of our product or the method of distributing it.

BUT the oil industry need not wait for any action or campain of its public relations committee. The answer is in the hands of a dozen oil executives. If they give the word and see that that word is carried out whole-heartedly, the greatest step forward in the industry's public relations will have been accomplished and greater peace assured for the oil industry than it has ever enjoyed. Those executives should see to it today that every price change and every other act which may be unfairly interpreted by the public, is explained in detail at the time of the act. This explanation should be given to every oil company employe, posted at every service station and on every pump, given to the newspapers and run in advertising space in newspapers and even general magazines all over the company's territory.

This explanation should be prepared by the operating officers and—with all proper respect—not by the legal department. The point is not how little can be said, or what the legal effect, if any, will be. The point is to make a real honest sales talk, a full and frank explanation of business facts such as would be made to the president of the company if he had been away in Europe for six months and then suddenly appeared at headquarters and said, "Why did you raise that price?"

AND this must be done on any crude oil changes just as well as on any tank wagon changes. The companies making the changes must also make the explanation. The explanation cannot and should not be made by any central body. It would be misunderstood. Each company is acting on its own account in this business and it should explain on its own account. Nor can the big companies sit back and let the small companies start explaining. The burden is on the big companies although the small companies, when they make changes, should also make sound explanation.

It makes one weep to think that the price changes of this spring particularly are the excuse for another Federal Trade Commission inquiry at the request of the Senate. The changes in price have been fully warranted, have been conservatively made and can be defended a whole 100 per cent. All were sound economically and yet the industry has to suffer the noise of an investigation. But the industry has withheld explanation until, presumably, its officers will be hauled to the witness stand under subpena placed under oath like a lot of criminals and the reasons for the changes dragged out of them by a spectacular "prosecuting attorney," so to speak. Even though the report of the Commission is finally in the oil industry's favor, much damage will have been done.

The situation is up to the leading oil executives of the country. If they want continued investigations of this character, the policy of the past will insure them without question.

Chain Filling Stations to be Future Development of Industry

By F. W. Lovejoy
Vacuum Oil Co., New York

Delivered before New York State Petroleum Marketers Association, New York City, June 7.

THE major trends in any industry are the foundation upon which many a success has been built. The minor trends are frequently false masonry and if used in a business structure, except as temporary scaffolding, tend to throw the whole design off, weaken construction, cause much needed repair and possibly rebuilding.

The younger the industry, the greater number of minor trends, and if destined to be a big industry, the more important it is to follow the major trend, as indicated by the economic need which gave birth to the industry.

The filling station business is the child of the automobile industry. Nurtured as it is by the economic need of its foster parent, the automobile, we but have to study the major trend of automobiledom to see what will very likely influence the trend of the filling station business. Having determined that, and refusing to be misguided by the constantly arising and distracting minor trends, a fair degree of accuracy in forecasting may be attained.

It is not many years ago, industrially speaking, that the first automobile rolled down Main street in any village. For a time it was the plaything of the rich and the most important problem confronting the automobile manufacturer, as well as the owner, was to keep it running. Mechanically it had defects. Many manufacturers were producing many different makes and models but comparatively few of each. Many troubles confronted the industry—finance, design, seasonal selling, model trends and service.

Sifting Out Manufacturers

THE individual manufacturer's solution of these minor trends, or rather his ability to use them as superstructure while ferreting out and following the major trends, determined his success or failure.

Gradually, as the far-seeing manufacturer, following a sound major trend, managed to put his shoulders above the crowd, and the automobile instead of being a luxury became an economic necessity, capital was induced into the business, and through combination, always the final stage of an industrial supremacy, cars were turned out in large numbers; they became standardized in design and price levels until today approximately 90 per cent of all cars are built by about 11 manufacturers.

In fact, this latter major trend was absolutely essential because until the automobile did reach the masses as a fool-proof conveyance, in turn to inspire universal road building, and thereby more general use, our claim to industrial supremacy as a nation remained a vulnerable honor.

Automobile Must Keep Us On Top

BEING the only empire that had reached the heights of success without waterways, after the railroads had carried us to supremacy, we needed the automobile to keep us on top. That it has done so is the fact—testified to by the remarkable growth of automobile ownership—one car for every six people in the United States and only about three million cars in all the balance of the world.

But as we said, in the early stages before design became standardized and capital made it possible through combination to concentrate manufacture into a few hands, the problem was how to keep the automobile going.

Owners were not mechanics, cars were in the experimental stage and the public demanded service, which took the form of the garage or repair shop operated by an individual to whom car troubles could be referred and by whom repairs could be made.

Because these garage men had the knowledge, operating as specialists, the motorist went to them for all their motor aids—gas, oil, repairs, accessories and advice. With the major trend away from many manufacturers with small production to few with large production there came into being the Service Station, usually maintained by the manufacturer. The motorist, because he felt that the men in these service stations were experts, tended to have repairs adjusted there. Fortunately as well, standardized design and better workmanship brought about less need for repairs, and good roads, with the resultant wider touring range, created the need for a more extensive distribution of the most important of all service—oil and gas. Thus came into being the Filling Station.

Filling Station Major Trend

A MINOR trend at first, and, too, but a few years ago, it has now developed into a major trend of vast importance until the whole country is literally honey-combed with filling stations.

While the garage will always exist in direct proportion to its ability to give comparable service with the manufacturer's service station, undoubtedly the large part of our oil and gas volume will be dispensed from the filling station. However, whether the filling station can exist in its present form and be a profitable business is an open question. It is what I want to discuss with you today aided wholly by the major trends—not to be thrown aside by the minor influences such as "company control," "lease and license," etc.

These factors in one form or another will always be in the business. It behooves us to not become entangled in their meshes lest we be forced out of the race because tied too securely to one thing or the other so we can not maneuver and take advantage of the major trend.

As Independent dealers you have little to worry about, provided you take

New York Jobbers Meet

CLEVELAND, June 7.—F. W. Lovejoy who has spent two years in making a survey of marketing conditions in general and the future of the filling station in particular for the Vacuum Oil Co., was the principal speaker at the annual convention of the New York State Petroleum Marketers Association which was to be held at the Waldorf-Astoria hotel, New York City, today.

B. M. Marcus, president of the New York jobbers' association and also president of Metro Stations Inc., of Olean, N. Y., had sent out an invitation to all Independent jobbers, whether members of the New York Association or not, to attend the meeting. The opening meeting was to be held at 10 a.m. and the first speaker scheduled was Franklin Miller of the Curtis Publishing Co. who was to talk on, "The Importance of Salesmanship."

He was to be followed by Mr. Lovejoy, speaking on the topic, "The Present and Future of the Independent Filling Station." Francis H. Sisson, vice president of the Guaranty Trust Co. of New York, was to speak on "The Business Outlook." At the afternoon session, L. V. Nicholas, president of the National Petroleum Marketers Association, was to speak his address to be followed by open forum discussion of the jobbers' most pressing problems.

Officers for the coming year were to be elected at the afternoon session.

your cue from retail successes in other industries and handle merchandise in terms of **buying** for the public, rather than to **sell** to the public. All too many dealers have signed their birth-right away on the altar of seeming immediate gain, a cement roadway, a pleasant sounding extra discount or a gaudily painted front, only to find that the public wants what it wants when it wants it and refuses to be a party to accepting products merely because a dealer handles them.

As Independent dealers you will be glad to know that while three years ago about 70 per cent of filling stations were controlled and only 20 per cent Independent, today the ratio is reversed and nearly 70 per cent are Independent. And that is bound to be the ultimate, because without a free market for goods no industry lives long. The temporary blocking of outlets and tendency to force consumer acceptance violates the one true American trait, independence.

Say what we will, to quote one of our greatest merchandizers, "In the last analysis the consumer is king. He makes and unmakes manufacturers, jobbers and retailers. Opposed, he backs up into a stubborn resistance; encouraged, he carries you on to fortune."

It is estimated that nearly seven billion dollars are annually invested by the American public in the upkeep of their cars—no mean amount. Most of this goes for oil and gas and a goodly proportion is dispensed through the filling station. Yet nearly 27 per cent of the dealers went out of business in 1925—one in every four. In fact more dealers failed than came into the business—surely not a very healthy condition. In an effort to determine the reason for this unusual showing we came upon exceedingly interesting merchandising truths which may, when all is said and done, determine the future of the filling station. At least a prominent guide post is there.

27 Per Cent Fail

IN a survey made among a large number of filling stations, located all over the country, we found that given similar advantageous locations, success or failure depended upon the relation of the "slack hour" to the "busy hour." If a filling station is on a slack hour basis many hours a day, the cost of upkeep or overhead eats up the profit, and the comparatively few busy hours in which profit is made does not offset these losses.

To be more specific—the "slack hour" is when the attendant services cars say half of the time, the motorist paying in little money, the overhead remaining the same and the total effort showing no profit.

During the "busy hour" many motorists come in—pay in plenty of money—and deducting the fixed overhead there is shown an excellent profit. The average filling station has four hours a day, three days a week and five months in the year on a "slack hour" basis. Obviously no industry can stand this and really here is the reason why so many fail.

We also found that the motoring public is divided into three classes Thirty per cent are shoppers, trading here today and there tomorrow. Forty per cent are transients, coming sometimes hundreds of miles. The balance are regular customers. One out of every 40 cars passing in a quarter of an hour stops at the average filling station. The average rate of service is one car every six minutes or 10 an hour and the average sale, one quart of oil to about eight gallons of gas.

Now with these very enlightening figures, it is not difficult to see why so many filling stations go out of business. The longer they stay open in hours per day, in an effort to catch the fleeting motorist, the worse they are off, because adding slack hour upon slack hour in the hope of selling enough volume to show a profit for the day only increases overhead and at best only introduces a larger "slack hour" problem.

Being blocked at both ends—on one hand by the possibility of a "slack hour" and on the other hand with so busy an hour that motorists are turned away, the filling station must add another attendant and with him comes another "slack hour." It takes a keen merchandizer to make a permanent success in a filling station.

Service In Operation

IN studying why motorists stop at any particular filling station, we find that their first requirement is service in terms of oil and gas. We also learned that the motorist's interpretation of service was really in the operation of his car. All good filling stations give service in terms of wiping the wind shield, inquiring regarding the trip and offering road directions. Therefore, that form of service has evolved into an expectancy. Then, too, the motorist's consciousness of service usually comes when he is away from the filling station, and is heralded by a sweet running motor. If the motor fails he damns the filling station.

So it behooves the filling station owner to dispense good quality oil and gas and of brands which have favorable public acceptance, if he would eliminate "slack hours," corral the shopper, influence the transient and increase his regular patronage.

Signing a lease with a gasoline company on the plea that there may be a shortage some day and that the license will insure obtaining a supply is sweet music to listen to—but based upon rather flimsy reasoning. In the first place, why must there be a shortage? In the second place, why should the supplier give **you** gas and oil and deny himself through his own stations? That doesn't seem reasonable.

While the industry was in its youthful stages most filling stations started in a small way and were made up wholly of one man establishments. Now combination is entering in. The trend is a major one and the future development will undoubtedly be the chain group.

Combination Necessary

THE need for advantageous buying, the fact that the motorist wants to trade at clean, well-located and universally equipped stations make it necessary for combinations of capital, even though they may be wholly local, to finance and direct the filling station chain.

Such chains are being organized all over the United States. While they predominate at present in groups of two and three, there is a relatively large number of larger chains of three and more. It is not inconceivable that eventually we may have a national chain of filling stations, linked together by one business policy, with standardized equipment and trade-marked brands of oil and gas, which the motorist can be assured are the genuine article and of a given quality.

When that day comes we will have in the filling station business a nationally organized distributing outlet which will be the envy of many an industry. The chain idea it not new. It has already fought its way to the front and been placed upon an economically sound basis in the hardware, grocery, drug, five and 10-cent store, and other industries.

These chain groups for a time struggled with the same merchandizing problems that confront the filling station. They branded their own goods or purchased products in the open market with an idea that they could force them upon the public.

Cannot Force the Public

MANY of them approached bankruptcy before they realized that the time wasted in trying to force upon the public inferior goods or products of unknown value was too costly. Today you will find that all of the successful chain stores in any industry, regardless of whether they have their own brands or not, are profitably handling nationally advertised goods—goods which have the respect of the public, and bring to the merchant the good will which is absolutely essential to his welfare.

As filling station men, whether in a chain or as individuals, you are the ultimate channel for dispensing oil and gas. There will always be a place for the garage, but the major portion of oil and gas will go through filling stations.

While company controlled filling stations will probably always be in the field, they will only prosper in proportion to the public's demand for the goods they dispense. Regardless of the amount of capital they may be able to control, they cannot hope to force public acceptance in sufficient volume to make the effort profitable. If they gain the public good will and have the filling stations, then they will do the business.

The industry will probably always have some form of lease and license,

which is a thorn in the flesh, but as sound merchants, if you will refuse to bind yourself to any one form of control, keeping in actual business practice your independence, then you will be foot loose and free to buy for the public what the motorists want to buy, rather than what you would like to sell.

Unfortunately, some filling station owners have lowered the level of the industry by practicing substitution. This is a particularly insidious habit, and if allowed to continue is going to invite a constantly poorer type of merchant into the business, and the honest dealers are going to suffer. You have in your hands the power to correct this evil.

My advice is that you use every effort to bring the substitutor to account, because as the public becomes conscious of the fact that substitution is being practiced upon it, it will turn in rebuttal and the industry will lose a great part of the good will, which its honest service has built up.

To sum up, bear in mind that the automotive industry is one of the greatest aids which has ever come to our country. It is the means of our maintaining industrial supremacy.

The filling station is an economic need in terms of service to these motor cars. It must rest its case for permanent success upon sound merchandizing principles. To attempt forcing the issue and compelling the public to accept inferior or unsuited products will only prolong the agony. Already too many filling stations fail each year.

By no means have we reached the point of saturation in automotive ownership or filling station service. There is room for every one.

The future, however, is in some form of the chain group. You may not agree with me and you may show instances of individual successes, nevertheless, despite these individual successes and with full realization that they will always exist, the major channels will be in chain form, because of advantageous buying opportunity and uniformity of dispensing.

There may be other products which can be successfully handled by the filling station. It may develop that the dispensation of gas and oil will be divided, gas being dispensed from one type of station and lubrication confined exclusively to another.

Already exclusive lubrication stations are being operated very successfully. The income per hour is unusually high and the profit very satisfactory. Given good service in sound lubrication the motorist is soon made a regular customer and all of the hours in the day are easily made "busy hours."

As far as the present is concerned, however, we have to deal only with the future of the filling station as it is. To look too far into the future may tend to force us into one of the minor trends, and if we build on that superstructure too solidly we are not left in sufficiently flexible condition to get back on the main road.

Halle Makes Statement on Gulf's Suits

H. J. Halle, president of the Universal Oil Products Co., has sent to National Petroleum News the following statement:

Concerning the series of suits recently brought by the Gulf Refining Co. against certain licensees of the Universal Oil Products Co., we desire to make the following statement:

The Universal Oil Products Co. on Jan. 12, 1926 brought suit against the Gulf Refining Co. in the Federal Court at Fort Worth, Texas, for the infringement of 11 patents involving over 50 claims. This suit was brought on this large number of patents after careful prosecution of these patents through the patent office, and after an exhaustive investigation by our patent counsel as to the correctness and strength of our position. This suit is still pending.

The recent suits by the Gulf Refining Co. against certain of our licensees were fully anticipated by us before we brought our suit against the Gulf Refining Co. We have long since been entirely familiar with the Bacon, Brooks and Clark patents, sued upon in these suits by the Gulf Refining Co., and we were completely and perfectly satisfied that none of these patents could be sustained against the Dubbs Process used by any of our licensees.

The Gulf Refining Co. has had knowledge of the commercial operation of the Dubbs Process for some six years, and has never attempted in any way to assert any of its patents against our process, or even to make any claim or serve any notice of infringement until it brought these suits. We are fully confident that none of these patents sued upon can be sustained against the Dubbs Process, and have been so advised by our various patent counsel.

We will fully protect all of our licensees in accordance with our license agreements and will vigorously defend these suits brought by the Gulf Refining Co.

Grand Jury Investigates Huntley's Murder

Stirling Huntley

CLEVELAND, O.—Funeral services for Stirling Huntley, junior partner in the geological firm Huntley & Huntley, were held in Lareto, Tex., on May 31. Later, the body will be exhumed and taken to Arlington National Cemetery for final interment.

The geologist, 30 years old and prominent in geological work in South America and Mexico, as well as in the United States, was murdered near Rio Grande City, Tex. His bullet-riddled body was found three days after he had disappeared. He had driven out of Rio Grande City in a new car on the day he apparently was killed. The motive evidently was theft of his car.

A special grand jury will investigate the case. Confessions of two men arrested in connection with the robbery of a Raymondville drug store are said to include admission of the murder of Huntley. A bank book bearing the geologist's name was found in possession of one of the men.

Huntley returned from the Argentine about the first of this year. He moved his family to San Antonio shortly thereafter and started on extensive examination of properties for the Benedum-Trees interests. His son and only child, Stirling Huntley, Jr., had been born a short time before the removal to San Antonio.

He was born in Pittsburgh and was for two years a student in the school of journalism of the University of Michigan. After serving overseas with the Twenty-ninth Division, he entered the University of Pittsburgh and was graduated as an oil and gas engineer and geologist. His literary talent, though never used professionally, is familiar to National Petroleum News readers through published letters on tropical exploration.

John Golden Resigns as Head Of Tide Water Pipe Co.

BRADFORD, PA., June 5

JOHN E. GOLDEN retired on June 3 as president of the Tide Water Pipe Co., Ltd., after a period of service of forty-five years and six months. He is succeeded by R. H. Jones, who maintains his offices in New York and in the general headquarters of the Tide Water-Associated Oil Co. Precedent has been for the president of the pipe company to maintain offices in Bradford.

Mr. Golden's resignation was first offered several weeks ago and was rejected by the company, but was renewed and accepted upon his insistence that he be relieved of further duties.

In a formal statement issued by the company and sent to patrons and employes, regret was expressed at Mr. Golden's leaving the company. The statement was signed by George J. Hanks, vice-president and general manager of the company. Mr. Hanks further commented upon the service Mr. Golden performed, as follows:

"We feel that the withdrawal from active duty of our Mr. John E. Golden cannot pass without proper notation, not only on account of his forty-five and one-half years' service with our organization, but also due to the fact that he has been advanced from the lowest position to that of president. During the period he served as patrolman, telegraph operator, station engineer, assistant superintendent of telegraph, superintendent of telegraph, assistant general superintendent and president. This service has been equalled only by the forty-five years' service of his brother, Mr. A. W. Golden, who likewise had been advanced from the lowest position to that of president, and who withdrew from active duty two and one-half years ago."

John E. Golden is a native of Ohio. As a young man he entered the service of the Tide Water Pipe Company, at Titusville, Pa., his first duties being those of line-walker or patrolman. He took deep interest in his work and as a result was promoted from one position to another. Two years ago he was chosen as president of the company. He is one of the most expert pipe line men in the oil country. As a field man or an office man, he was equally competent. The men of the company, rank and file, have had confidence in John Golden. And he was well liked among the patrons of the company.

Mr. Golden, it is understood, will continue to reside here. He has large private interests.

At the annual meeting held in Bradford on June 3, officers were elected, as follows:

R. H. Jones, president; George J. Hanks, vice-president; W. J. Barker, secretary and assistant treasurer; J. Byron Deacon, treasurer and assistant secretary. These, with C. W. Morrison, the newly elected director, constitute the board of managers.

Ohio Jobbers To Discuss Coming Tax Fight

CLEVELAND, June 8.—Ways and means to combat a proposed 5-cent gasoline tax in Ohio will be discussed and a line of action probably outlined at the convention of the Ohio Petroleum Marketers' Association, June 17 and 18 in the Hollenden hotel, Cleveland.

Field Secretary W. C. Hughes of the Ohio association will report on the gasoline tax situation. Politicians are now paving the way to have elected to the next Ohio General Assembly men upon whom they can depend to vote for a 5-cent tax.

The Ohio marketers will wage the fight of the automobile owners in the state and will co-operate to some extent with the Automobile Owners' Protective League, organized by Peter Witt of Cleveland to have the gasoline tax limited to 2 cents a gallon, automobile removed from the personal tax duplicate and charge only $1 license fee for a car for the life of the car. Many of the Ohio marketers do not concur with all the Witt proposals but they approve a limitation of gasoline taxes.

Part of the campaign of the association consists of posting prominently the price of the gasoline on pumps, the amount of the tax and the total the buyer pays for his motor fuel. More than 4000 price signs with changeable figures have already been sold by the association to Ohio distributors for attachment to their pumps.

"It is surprising, our members tell me," Mr. Hughes said, "that so many Ohio motorists did not know they were paying a direct tax on gasoline until these signs were posted. We hope in this way to bring before the million or more car owners in the state the fact that they are paying a sales tax of almost 10 per cent. We believe these tags will cause some thinking before the November election."

J. L. Marsh, Vahey Oil Co., Youngstown, and vice-president of the association, will report on the effort to obtain lower freight rates from Group 3 to Ohio, rates that will be more in line with those in effect from Group 3 into Indiana. Harvey S. Cashatt, Central Ohio Oil Co., Columbus, will report on the association's proposed insurance service.

Dr. Gustav Egloff, Universal Oil Products Co., Chicago, on the morning of June 18 will talk on "Cracked Gasoline and Anti-Knock Fuels." In the afternoon of June 18 there will be an open discussion of "The Effect of Present Refining Methods on the Supply of Burning Oils."

Two Bureau of Mines films will be shown. One is entitled, "The World Struggle for Oil," and the other, "The Story of Gasoline."

A banquet and dance will be held in the Hollenden on the evening of June 17. Entertainment will be provided by the Cleveland Petroleum Club, and grease and lubricating oil manufacturers that have headquarters in Cleveland.

Women attending the convention will witness a performance of "What Price Glory" at the June 17 matinee and will be given a tour of the city on the morning of June 18 after which they will be given a complimentary luncheon by the hotel management at noon that day.

Marvel Equipment Sues Charging Infringement

CLEVELAND, June 8.—The Marvel Equipment Co. of Cleveland has recently filed suit in the United States district court at Cleveland against the Merit Oil Equipment Co. also of Cleveland.

The petition charges infringement of four patents covering two types of oil pumps, grease nozzle and truck, and asks for a perpetual injunction restraining the defendant from further alleged infringement; for an accounting of the profits claimed to have been made by the defendant company and for damages amounting to three times the profits shown. The petition is signed by A. J. Townsend, president of the Marvel Equipment Co. Tolles, Hogsett, Ginn & Morley and H. A. Marting are solicitors for the Marvel Co. and Wilkinson, Huxley, Byron & Knight of Chicago are counsel for the plaintiff.

"At least two other manufacturers have been notified by us that they are infringing Marvel Equipment Co. patents," said Mr. Townsend. We have requested that these infringements cease immediately and demanded an accounting of all profits made, with adequate damages.

"Four of the Marvel Products, our Nos. 600-B and 600-S oil pumps one-man grease nozzle, and handy express-type truck, are those most universally infringed, but several other Marvel units have also been the subject of infringements."

Lockhart Leaves P. & R.

DENVER, June 5.—W. E. Lockhart, for six years an executive of the Producers & Refiners Corp., resigned effective June 1 to become president of the Petroleum Investment Co., a Colorado corporation which has acquired considerable acreage in Oklahoma, Texas and Wyoming.

Mr. Lockhart has had wide experience in the oil industry. He came to the P. & R. in 1920 as vice-president and general manager and has held that position ever since.

Manufacturers Found Two Fellowships For Natural Gasoline Research

Staff Special
TULSA, June 5

RECOMMENDATIONS of the board of directors that a campaign of research and publicity for natural gasoline be undertaken were approved by members of the Association of Natural Gasoline Manufacturers at a meeting here June 1. Committees were appointed to arrange details of the campaign.

The gasoline manufacturers agreed to retain Drs. E. H. Leslie and G. G. Brown, professors of chemical engineering, University of Michigan, to direct research for the association. In addition it was voted to create two fellowships at the university for the purpose of conducting original research into the value and uses of the product. Two technical graduates will be elected to work under Drs. Leslie and Brown during the coming year as fellows.

The proposed educational campaign will consist of the advertising of results of the association's investigations in oil trade papers and such other mediums as the association may select. This work will be under the direction of the association's committee on public relations consisting of D. E. Buchanan, Chestnut & Smith Corp., chairman; S. C. Carney, Roxana Petroleum Corp.; G. G. Oberfell, Phillips Petroleum Co., L. F. Bayer, Tidal Refining Co.; H. R. Johnson, Akin Gasoline Co., and A. V. Bourque, secretary of the association.

Schedule of Costs

H. A. TROWER, Phillips Petroleum Co., was made chairman of a special finance committee to raise money to conduct the campaign. It was voted to invite both members of the association and other manufacturers to contribute to the fund. The membership decided that a fair basis for contributions would be $50 for companies producing up to 1000 gallons per day, $100 for companies producing more than 1000 gallons and less than 4000 gallons, and 2½ cents per gallon for companies producing more than 4000 gallons per day.

At the request of the association Dr. Leslie has prepared the following brief discussion of some investigations which he purposes to undertake for the manufacturers during the coming year. The program is an ambitious one, more detailed than has been previously undertaken by any oil trade association for the purposes of establishing the merits of any petroleum product. It follows:

"**Acceleration and Flexibility**—In our opinion the thing that sells gasoline to the public quicker than any other factor is the pep and flexibility that the motor exhibits. This is, of course, accentuated in cold or cool weather. As we know, natural gasoline will impart these desirable qualities. However, what is the proper amount to use to best advantage and what is, quantitively measured, the exact gain to the motorist? The work already done throws some light on these questions, but it should be supplemented with sufficient further work to make the results stand scrutiny by critical technical observers and students of the subject. Once established, definite information on this point alone would go a long way to convince refiners of the necessity of including natural gasoline in their gasoline if they wish it to be a quality product.

"**Feeding Systems**—What proportion of natural gasoline can be included in natural gasoline blended gasolines without causing trouble as a result of vaporization in vacuum tank feeding systems? What are these possible proportions at each of several temperatures at which the car may operate? That is, how does this factor limit the use of natural gasoline in blends at various seasons of the year in different climates?

"The question involved here is largely one of initial vapor pressure and has little to do with overall vaporization characteristics.

"**Losses in handling, transit, and storage**—This subject is important to producer, shipper and user. How is it related to initial vapor pressure, to A. S. T. M. distillation and to equilibrium flash vaporization characteristics? For instance, two products of the same vapor pressure at one temperature could have widely varying losses by vaporization if heated to some higher temperature. Is it not true that your butane 'loaded' product of today suffers larger loss than an old fashioned wild product weathered to have the same pressure at ordinary temperature? At any rate, what are these relationships, quantitatively, and what is the proper analytical procedure for their prediction?

"**Carburetion**—Carburetion is essentially a process of atomization in a stream of air, concurrent with, and followed by, partial or complete vaporization. It is really flash vaporization in a stream of air. Yet we evaluate gasoline by the A. S. T. M. distillation, a process that approximates differential vaporization and that is quite different from carburetion.

"As you know, I have studied the flash vaporization of natural gasoline blends and have many data bearing on the subject. However, much more work must be done and published to get the idea across and have the scheme adopted as a routine procedure, or, at least, relate it quantitatively to some simpler procedure that could be used in a routine way.

"The important point to be brought out by these studies is the fact that it is average volatility, or equilibrium flash vaporization characteristic, that counts in carburetion, and the use of large proportions of natural gasolines in blends is not only possible but highly desirable. I use 50 per cent natural gasoline in winter blends of a high-test gasoline widely marketed in Detroit. Why not demonstrate the possibilities in this direction to everybody?

"**Crank Case Dilution**—Natural gasoline undoubtedly wins in the first round here. It is all too volatile to seriously contaminate lubricating oil. However, who has proved it and told the world about the results? R. E. Wilson has done something in this direction, but it is far too little and the point needs much further emphasis.

"**Natural Gasoline as a Component of Motor Fuel Blends**—This relates to 1-d and the discussion of that point alone is pertinent here. However, such further matters as the shape of the distillation curve of blends, the losses of light components from such blends, and so on need discussion per se.

"Furthermore, what kind of natural gasoline should be used to best advantage in such blends? What about your high butane gasolines? Does increase in the butane content affect the blend in the same proportion as it affects the properties of the natural gasoline itself?

"**Anti-Knock Properties**—Although we have done some work on this subject it appears that it should be supplemented by considerably more. The world is not convinced by single investigations. The method of experimental approach is fairly definite.

"**Power Development and Mileage**—This is where natural gasoline will not show so well. However, our results to date indicate only a slight decrease in power as the proportion of natural gasoline in a blend is increased. On the other hand, the impression is current that a highly volatile fuel such as natural gasoline gives much less power and mileage. Why is this impression current? Is it not the result of use of too rich mixtures resulting from the greater volatility and from the lower viscosity affecting flow in carburetor jets?

"**Carbon Formation**—It would be interesting to know more about this, particularly as it is one of the factors that affects knocking and one on which the public has real knowledge. It would be a good sales point if it could be demonstrated that the use of volatile fuels has a really important influence on the rate of carbon accumulation.

"Analytical Characterization—Taking into consideration the facts as determined by the work outlined above, what type of natural gasoline is best and what handicap should be accorded products of other types? In view of this what routine analytical method or procedure should be used to correctly evaluate natural gasoline?

"Viscosity—One of the important factors in carburetion is the fluid flow through the capillary jets. In view of this it is necessary to know more of the viscosity of natural gasolines and natural gasoline blends at each of several temperatures. An absolute viscosimeter should be used in securing this information."

Tennessee Jobbers Drop Injunction Action; Expect State Control

Staff Special

CLEVELAND, June 8

STATE regulation of the gasoline distributing business in Tennessee is expected to follow the withdrawal last week of the injunction action of 24 Independent distributors in the state against the Standard Oil Co. of Louisiana, and other major distributors.

The governor of Tennessee and leading candidates for the legislature have announced their purpose to enact legislation next winter giving the state utilities commission power to control and regulate the gasoline business in the state, and to prevent unfair competition.

The breadth of their purpose has not yet been revealed and just how fine a control is expected to be maintained is still probably a question that will be subjected to lengthy debate. At any rate the smaller Independent gasoline distributors seem more content to face state control than to traverse again the business hazards they crossed last year when tank car prices of gasoline to them were approximately on a level with tank wagon and commercial account prices set by their chief competitors.

Stress Lack of Differential

THE withdrawal of the Independents' complaint in which they charged their major competitors with unfair practices, laying main emphasis upon the absence of a reasonable differential between tank car delivered prices and tank wagon prices, was without prejudice to the Independents' right to renew the action if conditions should require.

Attorneys for the Standard and other companies defendant in the action stated in court when a temporary injunction was sought to compel the establishment of a differential between tank car and tank wagon prices, and the elimination of the commercial accounts which benefited large consumers at the alleged expense of small distributors, that they did not intend to return to the conditions and practices complained of. Nevertheless, the chancery court at Murfreesboro, Tenn., saw fit to grant the Independents a temporary injunction stipulating a 3-cent differential between the tank wagon price of gasoline delivered in Tennessee, Group 3 refinery market basis, and the local tank wagon prices.

The temporary injunction was granted April 1 and hearing of the action on its merits was to have been held May 31 but was postponed later until July 19.

No Agreement is Reached

NO agreement was reached between counsel for the Independents and counsel for the Standard and other defendants and nothing was done that could be construed as a violation of the state of federal anti-trust laws, Mark H. Senter, Southeastern Oil Co., Chattanooga, and president of the Tennessee Independent Oil Men's Association, told National Petroleum News.

"Our counsel stated that in view of the statements made by attorneys for the Standard and other large companies as to that intention and purpose, there was no further necessity for an injunction at this time," Mr. Senter said. "For that reason the bill was dismissed without prejudice to our right to renew the suit if conditions require it. We do not apprehend any return to these conditions because the governor and leading candidates for the legislature all over the state, have announced their purpose to enact legislation next winter giving the utilities commission the power to control and regulate the gasoline business and prevent unfair competition."

Charged Conspiracy

THE Independents in their petition filed in January charged that the Standard conspired with its agents to drive the small Independent distributor out of business by abolishing customary price differentials. Other major distributors, the Sinclair Refining Co., The Texas Co., Gulf Refining Co., Pan American Petroleum & Transport Co., Mexican Petoleum Corp. of Louisiana and Producers & Refiners Corp. of Tennessee, acquiesced in the conspiracy, it was charged.

The complaining individuals, firms and companies were: Consumers' Supply Co., Murfreesboro; J. D. Hutton, Shelbyville; W. D. Hudson, Clarksville; E. E. Johnson and W. J. Dale, Columbia; A. L. Johnson, Pulaski; Valley Oil Co., Memphis; Benzol Gas Corp., Nashville; Estes-Cooper Oil Co., Nashville; Thompson Oil Co., Nashville; Elk Oil Co., Fayetteville; Sanford Garner, Covington; Consumers Oil Co., Winchester; B. F. Diggs, Paris; Nashville Oil Co., Nashville; H. N. Moore, Dresden; C. E. Davis, Dyersburg; Mark H. Senter, Chattanooga; J. M. Lassing, A. P. Carver, J. N. Guthrie and T. B. Gennings, Nashville; Cook Service Station, Murfreesboro; A. P. Stephenson, Chattanooga; Obion Oil Co., Union City; A. L. Neeley, Columbia, and Abeel Bros., Chattanooga.

Southwestern Petroleum Properties Sold

CLEVELAND, O., June 5.—About $13,000,000 was the purchase price of the properties of the Southwestern Petroleum Co., which was principally the estate of the late George A. Forman, of Buffalo. The purchase was made by the Midland Securities Co., 17 Battery Place, New York, a company closely affiliated with The Texas Co.

The transaction took in all the holdings of the Southwestern, including assets other than producing properties and refinery. Trustees desired to close up the entire estate at once, so such assets as stock in other companies, cash account, etc., were put in with the oil properties.

Between 5000 and 5500 barrels of production, in Oklahoma, Kansas, Kentucky and a small amount in Pennsylvania, and considerable undeveloped acreage in the Mid-Continent were thus acquired by The Texas Co. The interest of the Cliff Petroleum Co., which is headed by Ralph Hochstetter, of Buffalo, an associate for many years of Mr. Forman, in the Kentucky properties, was acquired by the buyers. These properties are principally in the Big Sinking field of eastern Kentucky.

In 1921, the Forman and Hochstetter interests assumed control of the Great Southern Refining Co., whose refinery was at Lexington. Later, the Great Southern purchased a refinery at Pryse, Ky. The Lexington plant has been idle for more than a year while the Pryse plant has been enlarged. Interest in this company acquired by The Texas Co., amounts to about 85 per cent, there being some stock held in Lexington. The Pryse plant was enlarged by the former owners until it now has skimming capacity of 4000 barrels daily and in addition has a Dubbs cracking plant of 1000 barrels daily capacity. The Great Southern has a number of bulk stations in central Kentucky and conducted a good sized marketing business through these stations and otherwise.

Mid-Continent properties of the Southwestern are capable of increase in production and the settled production of the company has high value. Some acreage in Wyoming is included, this being located in the Medicine Bow region.

New President is Named For Midwest Refining

John D. Clark

CHICAGO, June 3.—John D. Clark of Chicago, vice-president of the Standard Oil Co. of Indiana, has been chosen president of the Midwest Refining Co. of Denver, subsidiary of the Indiana company. T. A. Dynes, former president of the Midwest has become chairman of the board of directors. As far as can be learned the Indiana company is not arranging immediately to name a successor to Mr. Clark who resigned his office as vice president and his position as assistant to the chairman of the board to become the head of the Midwest. He remains a director of the Standard Oil Co. of Indiana.

In his previous capacity with the Indiana company Mr. Clark was vice president of the Midwest Refining Co. Now as president of that organization and a director of the parent company he continues also as a member of the board of directors of the Pan-American Eastern Petroleum Corp. Mr. Dynes came to Chicago from Denver, arriving here Tuesday morning, June 1. Mr. Clark accompanied him back to Denver Thursday and will not be back in Chicago before the middle of next week. His new residence arrangements will not be made until late in the summer.

Mr. Clark was an attorney in Cheyenne, Wyo., and a banker there in an extensive way when he entered the oil business. Incidentally he was quite prominent in Wyoming politics. Cheyenne was his home until 1919 when he became identified with the Midwest in Denver. One of his first important services to the Midwest was to supervise the legal work incidental to the merger with the Standard Oil Co. of Indiana. He is a native of Colorado, received his early training in the public schools of Cheyenne and graduated from the University of Nebraska in 1905. He took his law degree from Columbia University in 1907.

Subsequent to 1907 Mr. Clark practiced law in Cheyenne and took care of his individual interests there until Midwest Refining Co. requested him to take charge of its legal department in 1919. In due course he assumed the duties of executive vice president and in the spring of 1923 (following the acquisition of the Midwest by the Standard), he was elected director of the larger organization, shortly becoming vice president and assistant to the chairman of the board of directors, R. W. Stewart.

In spite of the fact that he is still less than 40 years old, Mr Clark is looked upon as one of the best qualified men in the oil industry by persons who know him. He became conversant with problems of production and refining while he was active in the management of the Midwest. His activities with Standard of Indiana, especially in connection with the Missouri ouster suit and the Wisconsin Q.D.A. investigation, have made him an authority on matters of marketing.

Shipments from Los Angeles Week Ended June 5

(Barrels of 42 Gallons)

	Crude	Gasoline	Gas Oil	Fuel Oil	Tops	Kerosene	All Products
Atlantic Domestic	155,000	153,288	149,636	211,185	.....	.....	669,109
Atlantic Foreign	.....	.....	1,553	175,004	.....	.....	175,004
Pacific Domestic	280,300	117,343	.....	393,840	.....	.....	793,016
Pacific Foreign	149,510	.....	.....	420,849	.....	70,000	490,849
Total Shipments Week Ended June 5							2,127,978
Total Shipments Week Ended May 29							2,687,279
Total Shipments Week Ended May 22							2,105,787
Total Shipments for May							10,365,419

Ships Clearing for the Atlantic Coast

Crampton Anderson to Baltimore with 77,416 barrels of gasoline for Pan American Petroleum Co.

Cape Ann to Philadelphia with 73,636 barrels gas oil for Pure Oil Co.

Swiftarrow to Fall River with 77,000 barrels crude for Swiftsure Oil Co.

Hahira to Philadelphia with 75,872 barrels gasoline for Sun Oil Co.

John D. Archbold to Baltimore with 140,000 barrels fuel for Standard Oil Co. New Jersey.

Sabine Sun to Philadelphia with 78,000 barrels crude for Sun Oil Co.

W. M. Burton to Philadelphia with 76,000 barrels gas oil for Pure Oil Co.

Oklahoma Jobbers to Talk Over Market Worries

TULSA, June 7.—Distressing market conditions, price cutting, unfair trade practises and kindred subjects will not be discussed in the future at meetings of the Oklahoma Oil Jobbers Association. This policy was recently adopted by the new board of directors.

Meetings of the association will be devoted to study of details of management, such as delivery and handling costs, maintenance and repairs, accounting systems, credits and the like. The first meeting of this sort will be held at Oklahoma City on July 8, C. M. Kinney, secretary, has announced.

Mrs. E. W. Marland Dies After Long Illness

Staff Special

TULSA, June 7.—Mrs. Virginia Collins Marland, wife of E. W. Marland, president of the Marland Oil Co., died at her home in Ponca City at 6 o'clock Sunday evening, June 6. She had been ill for a number of months but grew worse suddenly Sunday morning so that emergency calls were sent out to members of the family.

Samuel C. Collins, vice president of the company and a brother of Mrs. Marland was at Kansas City on his way home from the east. He hurried to the bedside of his sister by special train. Mr. Marland and the two children, George and Miss Lynde, and Samuel Collins senior, her father, were in the east. They started for Ponca City immediately bringing Mrs. Marland's three sisters, Mrs. Bess Olden, Mrs. Frank Plumme and Mrs. George Roberts, all of Philadelphia. The family group arrived in Ponca City, Monday morning.

Mrs. Marland was born at Philadelphia on July 7, 1876. She and Mr. Marland were married on Nov. 3, 1903 and came to Oklahoma about 14 years ago. She has been a charming hostess at the magnificent Marland residence at Ponca City where she has entertained thousands of persons. She took a deep interest in the extensive Marland gardens and in the beautification of Ponca City.

Funeral services were to be held from the home at 1 o'clock June 8. A private funeral for members of the family only was to be held at 2 o'clock and burial was to be at the Odd Fellows cemetery at 3 o'clock. All Marland offices were to be closed at noon on the eighth and the Marland 25,000-barrel complete refinery at Ponca City was to be closed down during the funeral.

ESTHERVILLE, IA.—John Wiegands is installing an auto laundry and two gasoline pumps here.

Oklahoma Production Again Declines; Burbank New Tracts Productive

By A. F. Hinton
N. P. N. Staff Writer

TULSA, June 5

OKLAHOMA production declined slightly more than 6000 barrels the past week, according to National Petroleum News' estimate, with practically all fields except Burbank recording losses in output. The state's production is now lower than it has been at any time since the week ending March 20, when it was around 451,000 barrels as compared with 455,650 barrels at present.

Burbank has been increasing its production of late through the agency of new wells being completed on tracts purchased at the sale of last March, when Phillips Petroleum Co. stepped out and tried to buy all the near-Burbank tracts offered for sale. One tract that they did not acquire, however, went to the Skelly Oil Co., and that company completed its first well on the lease during the past week. The way this well started off indicates that it made an excellent buy at $68,000.

This Skelly well, which is located in the SEc NW of 2-27-5, the farthest north location in the Osage county side of the Burbank field, got the first gas at 2910 feet, first oil from 2915 to 2921 feet, where it showed for 185 barrels, and was drilled to total depth of 2968½ feet, where it flowed 985 barrels natural in the first 24 hours. In the second 24 hours it produced 944 barrels. It is probable that this production could be greatly increased if the well should be given a shot. The company is now building a rig for No. 2, one location to the north.

Another new Burbank well is the Phillips Petroleum Co. No. 4, in the SEc SW of 7-26-6, in the south end of the field. This well showed for 250 barrels natural in sand from 2926 to 2997 feet. It was then given a shot, and is now flowing about 1000 barrels daily. There are now 30 wells drilling at Burbank, as compared with 10 at the time of the Osage sale, and in addition there are 10 locations and 12 rigs up for a total of 52 operations under way.

Big Well at Kelleyville

ONE of the most interesting wells of recent weeks in Oklahoma is the No. 1 Fee of J. H. Wright, in the NWc SE of 24-17-10, in the old Kelleyville-Bristow area of Creek county, where a number of large pools have been developed and where production dates back some 15 years. This well, which was originally completed in 1914, was deepened during the past week into the Dutcher sand, and started off flowing at the rate of 140 barrels an hour, settling later in the week to 2080 barrels daily.

The remarkable thing about this well is that it was only a small producer when first drilled into the Dutcher sand 12 years ago, its original sand record having been from 2470 to 2496 feet. About a month ago, when its production had dwindled down to practically nothing, it was deepened only one foot, according to reports, and started off at the rate of 400 barrels a day. In the last deepening it was taken down to 2503 feet, where it started making its big flow. The well also is reported to be making 43 gravity oil now as compared with 39 gravity produced from higher up in the sand.

Another good well in this vicinity is the No. 6 Bucktrot of the Pioneer Petroleum Co., in the SWc NE of 24-17-10, about 600 feet north of the Wright well. This well at last reports had been drilled five feet into the Dutcher sand topped at 2437 feet, and flowed about 900 barrels the first 24 hours, with about one million feet of gas. The well will be deepened when sufficient pipe line facilities have been made available, as present equipment has been taxed to care for Wright gusher.

Seminole City Area

IN the vicinity of Seminole City, Seminole county, where the Indian Territory Illuminating Oil Co. drilled in the discovery well two months ago with initial production of better than 1000 barrels daily in a wildcat location, another good well was brought during the past week. This was Barnsdall Oil Co. No. 1 Carter, in the SEc NW of 24-9-6, which has been drilled 17 feet into the sand topped at 3823 feet and is flowing 105 barrels an hour. The new well produced 1438 barrels in the first 14 hours after drilling in.

The Barnsdall company also is completing another well on this lease, its No. 2 Carter, located in the NEc SE NW of 24. This well apparently got the sand nearly 100 feet lower than No. 1, finding the top at 3929 feet, and has made several flows while being drilled in. The southeast offset to the Barnsdall No. 1 Carter is the No. 2 of the Indian Territory Illuminating Oil Co., which is drilling at 3875 feet. This company's No. 1 Reed, in the SWc NE of 24, is nearing the oil pay, and should be in within a short time.

New Wells at Garber

GARBER production has declined sharply during the past two weeks, due to a lull in completions, but it is likely that the field will stage another come-back in the near future, as another batch of wells are about due. The latest well in the field at this time is the No. 28 Kisner of the Sinclair Oil & Gas Co., located in the NEc NW NW of 19-22-3W. This well drilled out the cement plug at 3032 feet and when the oil sand had been penetrated started flowing at the rate of 100 barrels an hour.

Another new well now under process of completion in this field is the Roxana Petroleum Corp. No. 4-H Schroeder, in the SWc NW SW of 18-22-3W. This well topped the upper Tonkawa sand

Drilling Operations in Oklahoma, Kansas and North Texas

	Week Ending June 5					Week Ending May 29				
OKLAHOMA	Loc.	Rigs	Drg.	S.D.	Total	Loc.	Rigs	Drg.	S.D.	Total
Burbank	10	12	30	...	52	7	8	36	...	51
Other Osage	8	11	49	12	80	12	14	58	10	94
Bristow-Cushing	28	27	179	24	258	28	25	182	26	261
North Oklahoma	7	36	207	63	313	8	37	213	53	311
South Oklahoma	21	31	169	39	260	22	24	170	36	252
Muskogee	..	15	55	12	92	...	11	57	9	77
Okmulgee-Bristow	6	61	142	36	245	10	51	148	33	242
Tonkawa	1	...	6	2	9	1	...	6	2	9
Wewoka-Cromwell	18	25	166	31	240	19	24	169	29	241
Total Oklahoma	99	218	1003	219	1539	107	194	1039	198	1538
KANSAS	63	109	267	103	542	67	89	264	106	526
NORTH TEXAS										
Eastland County	..	3	50	7	60	...	3	48	6	57
Stephens County	..	11	41	9	61	...	16	39	14	69
Texas Panhandle	..	141	195	19	355	...	124	168	20	312
Mexia District	..	..	2	3	5	...	...	3	3	6
E. Texas Wildcats	..	4	11	13	28	...	7	8	13	28
W. Texas Wildcats	..	87	305	73	465	...	93	306	75	474
Wichita Falls	..	77	140	41	258	...	76	154	38	268
Total N. Texas	...	323	744	165	1232	...	319	726	169	1214
GRAND TOTAL	162	650	2014	487	3313	174	602	2029	473	3278

Completions in North Louisiana and Arkansas, Week Ended June 3

LOUISIANA

Urania—LaSalle Parish

Company	Well	Location	Depth	Yield
Arizola Pet. Co.	Tannehill No. 7	36–10–1E	1547	60
Degman & Youngblood	Hardtner & Tannehill No. 1	8–10–2E	1565	Dry
Hamilton & Musick	Volk No. 2	26–10–1E	1541	80
Hardtner Oil Co.	Urania No. 4	8–10–2E	1520	250
La. Oil Refining Corp.	Tremont B-4	30–10–2E	1555	250
Nat. Gas & Fuel Corp.	Urania B-1	18–10–2E	1520	150
Ohio Oil Co.	Urania No. 7	18–10–2E	1518	100
Sherman et al.	Russell No. 3	25–10–1E	1555	125

Grant Parish—Little Creek District (Urania Extension)

Montague Oil Co.	Zenoria Lbr. Co. No. 1	11– 9–1E	1505	250, 80% S.W.

Caddo Parish—Caddo District

Gulf Refining Co.	Ferry Lake No. 233	16–20–16	2285	60
Gulf Refining Co.	C. W. Lane No. 17	13–21–15	3783	25, 5m. gas
W. D. Chew	State No. 3	34–21–16	1844	50
D. C. Richardson	Youree-Randolph No. 4	13–20–15	2270	100
Texas Oil Co.	Mason Fee No. 4	33–21–16	1870	50
Tholl Oil Co.	Huckaby No. 8	14–21–15	1610	100

Caddo Parish—Vivian

Bussa et al.	Hardeman No. 1	24–22–15	1055	s.w.
S. L. Ricketts	Caddo Levee Board No. 12	23–22–15	1075	25

Homer—Claiborne Parish

Gulf Refining Co.	Len Langston No. 5	19–21– 7	1210	15

Bellevue—Bossier Parish

Gulf Refining Co.	Bliss et al No. 8	10–19–1	434	20

Ouachita Parish

Company	Well	Location	Depth	Yield
J. M. Huber, Inc.	Edwards No. 2	1–18–4E	2235	3m. gas
J. E. Jordan	Ouachita L. & D. Co. No. 1	17–18–4E	2230	4m. gas
Pioneer Oil & Gas Co.	Nolan No. 1	17–18–4E	2232	3m. gas
McKinzie et al.	McKinzie No. 1	6–19–5E	2155	15m. gas

ARKANSAS

Lisbon

Allday et al.	Murphy No. 1	4–17–16	2155	75
Atlantic O. P. Co.	Andress B-3	16–17–16	2146	35
Atlantic O. P. Co.	Graham No. 2	16–17–16	2125	25
Bond & Evans	Killgore No. 3	4–17–16	2160	25
Humble O. & R. Co.	Goodwin No. 2	16–17–16	2123	150
Imperial O. & G. Co.	Primm No. 2	21–17–16	2184	75
Magnolia Pet. Co.	Harrell No. 1	4–17–16	2133	500
Nat. Gas & Fuel Corp.	Andress No. 5	16–17–16	2160	75
Nat. Gas & Fuel Corp.	Willett No. 1	4–17–16	2135	250
Ohio Oil Co.	Goodwin No. 2	21–17–16	2130	50
Owens et al.	Slaughter No. 5	4–17–16	2163	150
Pure Oil Co.	Dumas No. 4	9–17–16	2130	75
Pure Oil Co.	Slaughter No. 3	4–17–16	2135	500
Pure Oil Co.	Slaughter No. 2	4–17–16	2153	25
Rovenger Oil Corp.	Graham No. 3	16–17–16	2134	50
Simms Oil Co.	Perry No. 4	16–17–16	2101	35

Smackover

Estes et al.	Murphy No. 3	15–16–15	2455	100
Imperial O. & G. Co.	McClannahan No. 8	6–16–15	2554	25
Marine Oil Co.	Hays No. 8	4–16–15	2622	30m. gas
Peer Oil Co.	Palmer No. 5	9–16–15	2490	120
Sinclair Oil Co.	Flannagan No. 8	6–16–15	2575	80
Woodley Pet. Co.	Umstead A-8	4–16–15	2657	35m. gas
Gulf Refining Co.	Clawson No. 2	14–16–15	2690	100

at 3011 feet, going out of it at 3063 feet, and went into the lower Tonkawa at 3104 feet. It has now been drilled to 3135 feet, where it is flowing by heads and showing for a well. Sinclair Oil & Gas Co. drilled in its No. 41 North Walker, in the SWc SE NE of 13-22-4W, getting the Hoover sand from 3098 to 3115 feet. This well started off flowing 93 barrels an hour. Roxana Petroleum Corp. deepened its No. 9-L Schroeder to 3052 feet after getting top of the sand at 3045 feet, and it is making 2100 barrels of 46-gravity crude daily. This well is in the SWc SE SW of 18-22-3W.

Wewoka Deep Sand

ONE new producing well was added to the list in the Wewoka deep sand area during the past week, but it is apparently only a small one, while there were several other wells drilled in that look as though they are failures. Production from this source was 20,839 barrels this week, a loss of nearly 3000 barrels in the past two weeks, and it is likely that this decline will continue from now on.

W. R. Ramsey No. 5 Amos, in the SWc SE SE of 31-8-8, in this field, made only 40 barrels daily when drilled to 4025 feet after having found the Hunton lime at 4008 feet. Dixie Oil Co. No. 5 Foster, in the SWc SE SE of 28-8-8, had a hole full of water at depth of 4203 feet. It will be plugged back to the Hunton lime at around 4000 feet, where it had a showing of oil. Magnolia Petroleum Co. No. 1 Turner, in the NWc NE NE of 8-7-8, south of the developed deep sand area, got the Hunton lime at 4070 feet and at five feet in had a small showing of oil and gas followed by a hole full of water. This well will be drilled on down to the Wilcox sand, and is now setting casing.

Production of the Wewoka deep sand was divided by companies during the past week as follows:—

Company	Well	Lease	Production
Amerada	1 & 3	Harjo	6,199
Prairie	1	Walker	1,980
Dixie	1	Garner	673
Homaokla	1 & 2	Carolina	530
Magnolia	1	Harjo	22
Magnolia	4	Harjo	1,778
Magnolia	3	Harjo	4,376
Magnolia	3	Franz	3,536
Ind.-Atlantic	1	Simon	800
Ramsey	4	Amos	945
Total	12 wells		20,839

Russell County New Sand

IN Russell county, western Kansas, where the field discovered by M. M. Valerius and the H. F. Wilcox Oil & Gas Co. two years ago is now making 5500 barrels daily from 95 wells, a new sand 200 feet below the field's regular pay has been discovered. The well making this find was the Stearns, Streeter et al. No. 2 Oswald, in the NEc SW SW of 8-12-15, one of the oldest wells in the field. Its total depth is 3312 feet and it is swabbing about 190 barrels a day. The field has two other producing horizons, known as the Oswald lime and the Oread lime, the first-named having been the original producing formation in the discovery well.

C. H. Laessig Married

Clemens H. Laessig, president of the Automobile Gasoline Co., St. Louis, was married June 2 at St. Louis to Mrs. Anna Dillen, daughter of Mr. and Mrs. Edward Homeyer. The wedding was held at Christ Church Cathedral. Mr. and Mrs. Laessig will be at home at 6803 Waterman Ave., St. Louis after August 1st.

Wilcox Gets Big Well In Gray County

By Telegraph

TULSA, June 8.—In the Pampa district, Gray county, Texas Panhandle, one of the best wells in the entire district is the H. F. Wilcox Oil & Gas Co.'s No. 3 Phoebe Worley, in Sec. 62, Block 3. This well is flowing 3600 barrels daily without having been shot and is only eight feet in the pay topped at 2970 feet.

The Wilcox company has a block of 3600 acres around the well and other companies have holdings in the near vicinity, the Prairie having an 80-acre lease a half mile south of the well. Sinclair Crude Oil Purchasing Co. is running the oil, having recently completed a 10-mile 4-inch line from the Wilcox 80,000-barrel tank to loading rack at Pampa.

Gray county production is now more than 4000 barrels a day and it is certain that an intensive drilling campaign will follow completion of this new well. The best previous well in the county was one of 500 barrels initial, also drilled by Wilcox two months ago.

Pampa is about 60 miles northeast of Amarillo on the Sante Fe railroad and is the seat of Gray county. The field is 10 miles southeast of the town. Production is from lime on the north flank of the Amarillo fold.

AMARILLO—L. R. Slater is now general superintendent of production for the Marland Oil Co. of Texas in the Panhandle district. He is a recent addition to the Marland organization, having until recently been with the Healdton Oil & Gas Co., in charge of that company's operations in the Tonkawa field.

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A. W. WHEATON BRASS WORKS, NEWARK, N. J.

Wheaton

Compilation Of Mid-Continent Refinery Operations

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National Petroleum News

Mid-Continent Refinery Operations Week Ended June 4 (By Telegraph)

	Kansas	%Change Previous Week	Oklahoma	%Change Previous Week	No. & Cent. Texas	%Change Previous Week	No. La.-Ark.	%Change Previous Week	Totals Week Ended June 4	%Change Previous Week	Totals Week Ended May 7
Plants Reporting	23		46		41		14		124		124
Daily Cap. (Bbls.)	98,200		165,900		144,300		51,700		460,100		460,100
Da. Av. Crude Runs	61,466	— 5.8	105,955	— 7.1	63,395	— 0.4	47,061	+ 1.4	277,877	— 4.0	260,298
Da. Av. Other Oils	7,499	+78.0	3,999	—46.4	6,689	—17.8	5	—92.7	18,192	—11.3	21,329
GASOLINE—Gallons											
Stocks May 28	10,840,760		39,730,497		17,566,597		5,470,972		73,608,826		84,934,817
Prod. 5-28 to 6-4	9,618,394	+7.9	15,348,391	—10.6	6,930,649	— 4.4	2,942,416	+ 4.8	34,839,850	— 3.6	32,552,797
Ship. 5-28 to 6-4	9,327,921	— 4.2	14,949,580	— 9.0	6,925,265	— 9.9	2,694,766	—12.5	33,897,532	— 8.2	38,271,939
Stocks June 4	11,131,233	+ 2.7	40,129,308	+ 1.0	17,571,981	+0.03	5,718,622	+ 4.5	74,551,144	+ 1.3	79,215,675
Ratio Sales to Prod	97.0%		97.4%		99.9%		91.6%		97.3%		117.6%
KEROSENE—Gallons											
Stocks May 28	1,613,601		4,720,247		1,620,398		453,182		8,407,428		5,894,176
Prod. 5-28 to 6-4	1,795,831	— 7.2	2,860,098	— 8.2	1,330,347	—19.3	486,037	—10.0	6,472,313	—10.6	5,915,375
Ship. 5-28 to 6-4	648,624	—64.1	2,222,833	— 7.3	1,021,715	—26.2	300,631	—48.7	4,193,803	—32.1	6,126,974
Stocks June 4	2,760,808	+71.1	5,357,512	+13.5	1,929,030	+19.0	638,588	+40.9	10,685,938	+27.1	5,682,577
Ratio Sales to Prod	36.1%		77.7%		76.8%		61.9%		64.8%		103.6%
STOVE DISTILLATE—Gallons											
Stocks May 28	1,444,665		2,241,958		246,924		56,784		3,990,331		2,560,500
Prod. 5-28 to 6-4	574,584	+25.0	201,074	—29.0	154,939	—55.9	29,526	+46.5	960,123	—13.8	1,421,338
Ship. 5-28 to 6-4	206,349	+ 2.4	341,882	+96.0	139,565	—47.9	23,646	+532.6	711,442	+ 9.9	1,075,253
Stocks June 4	1,812,900	+25.5	2,101,150	— 6.3	262,298	+ 6.2	62,664	+10.4	4,239,012	+ 6.2	2,906,585
Ratio Sales to Prod	35.9%		170.0%		90.1%		80.1%		74.1%		75.6%
GAS OIL—Gallons											
Stocks May 28	8,941,221		36,427,908		3,360,664		5,215,797		53,945,590		55,634,219
Prod. 5-28 to 6-4	1,710,832	— 6.3	714,244	—54.3	921,744	+145.6	1,721,795	— 4.3	5,068,615	— 9.1	6,481,845
Ship. 5-28 to 6-4	1,533,593	+ 1.4	1,340,206	—16.0	1,259,541	+ 5.8	2,070,685	+33.7	6,204,025	+ 6.1	6,619,536
Stocks June 4	9,118,460	+ 2.0	35,801,946	— 1.7	3,022,867	—10.1	4,866,907	— 6.7	52,810,180	— 2.1	55,496,528
Ratio Sales to Prod	89.6%		187.6%		136.6%		120.3%		122.4%		102.1%
FUEL OIL—Gallons											
Stocks May 28	9,387,953		41,561,036		19,423,664		7,759,955		78,132,608		66,207,923
Prod. 5-28 to 6-4	5,427,820	— 2.1	8,052,362	—24.1	8,946,167	+ 0.2	7,706,239	+ 3.0	30,132,588	— 7.5	30,438,333
Ship. 5-28 to 6-4	3,707,926	—23.1	6,263,543	—20.5	9,229,626	+ 5.1	6,599,645	+ 4.8	25,800,740	— 7.1	27,164,775
Stocks June 4	11,107,847	+18.3	43,349,855	+ 4.3	19,140,205	— 1.5	8,866,549	+14.3	82,464,456	+ 5.5	69,481,481
Ratio Sales to Prod	68.3%		77.8%		103.2%		85.6%		85.6%		89.2%

Gasoline, Kerosene and Fuel Oil Stocks Rise

By Telegraph

TULSA, June 8.

DEMAND for the principal products of Mid-Continent refineries declined sharply in the first week of June, according to reports from 124 refineries to National Petroleum News.

Shipments of gasoline, kerosene and fuel oil were at a lower rate than during the last full week in May.

Gasoline led in volume of decline, shipments for the week ended June 4 being 33,897,532 gallons as compared with 36,928,695 gallons for the week ended May 28, a reduction of 3,000,000 gallons.

Kerosene shipments decreased 2,000,000 to 4,193,803 gallons and fuel oil 2,000,000 gallons to 25,800,740 gallons.

As a result of the diminution of shipments the group of 124 plants reduced their crude runs 12,000 barrels daily, average of 277,877 barrels and rerun charges 2000 barrels per day 18,192 barrels. The chief reduction in runs was made at Oklahoma and Kansas plants. Kansas refiners cut their crude runs nearly 4000 barrels per day and Oklahoma plants about 8000 barrels per day.

Gasoline stocks at all plants increased around 900,000 gallons to 74,551,144 gallons. Kerosene stocks increased 2,200,000 gallons to 10,685,938 gallons, the larger increase being due to the fact that refiners have widened their kerosene cut materially on account of current high prices.

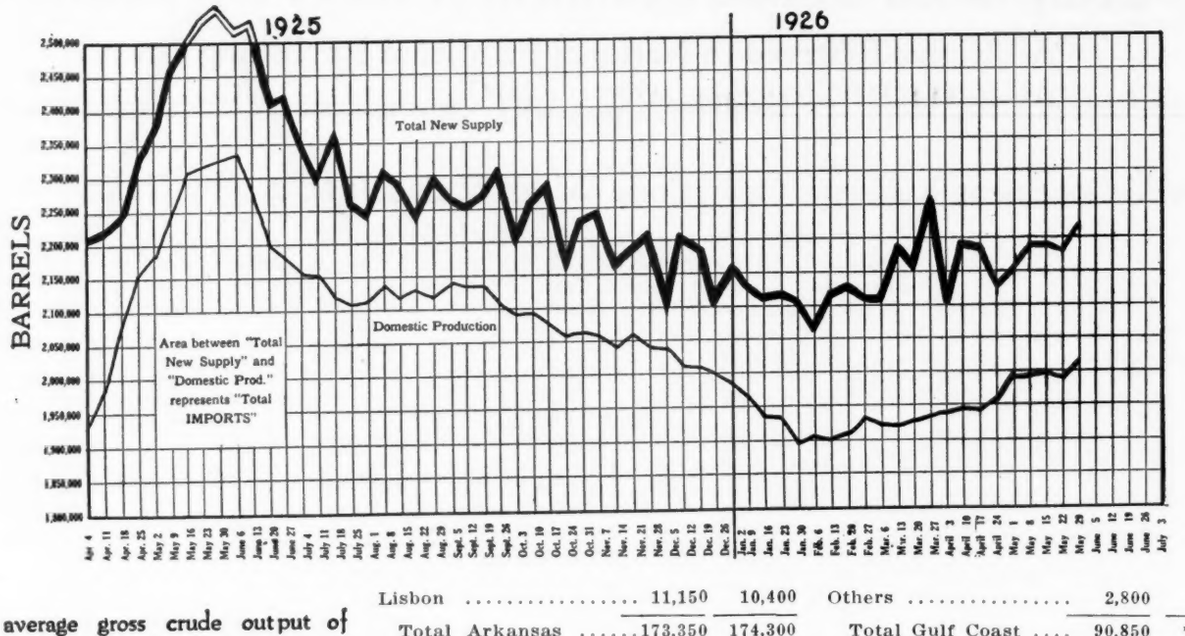
Fuel oil stocks increased 4,000,000 gallons but gas oil stocks were reduced 7,000,000 gallons.

Summary for the Month

Production and shipments, all reporting refineries, for four weeks ended June 4. Change in stocks figured from May 7.

	Gallons
Gasoline	
Production	137,011,668
Shipments	141,676,199
Net change in stocks	—4,664,531
Ratio sales to production	103.4%
Kerosene	
Production	27,668,802
Shipments	22,665,441
Net change in stocks	+5,003,361
Ratio sales to production	81.9%
Stove Distillate	
Production	4,041,327
Shipments	2,708,900
Net change in stocks	+1,332,427
Ratio sales to production	67.0%
Gas Oil	
Production	20,738,254
Shipments	23,424,602
Net change in stocks	—2,686,348
Ratio sales to production	113.0%
Fuel Oil	
Production	125,007,408
Shipments	112,024,433
Net change in stocks	+129,829,975
Ratio sales to production	89.6%

Daily Average Crude Oil Production and Imports



Daily average gross crude output of United States, by fields, for week ending with dates given below, as compiled by American Petroleum Institute

OKLAHOMA

	June 5	May 29
North Braman	3,200	2,850
South Braman	11,250	12,650
Blackwell	4,300	4,350
Hubbard	1,900	1,900
Thomas	2,950	3,600
Tonkawa	35,200	36,050
Garber	35,850	37,650
Burbank	44,800	43,250
Osage, outside Burbank	33,950	33,850
Watchorn	3,000	2,950
Cushing	21,850	21,800
Yale Jennings	16,900	17,250
Davenport	10,650	11,950
Bristow-Slick	29,750	29,800
North Okmulgee	17,700	17,750
Lyons-Deaner	4,300	4,300
Stroud	2,150	2,200
Cromwell	17,450	17,800
Papoose	10,950	12,250
Wewoka	28,100	30,700
Duncan district	7,350	7,350
Graham	9,650	9,600
Fox	4,600	4,500
Healdton	14,950	14,900
Hewitt	11,950	12,000
Others	71,150	68,750
Total Oklahoma	455,850	462,000
Decrease		6,150

KANSAS

Florence-Covert	1,800	1,800
Peabody-Elbing	4,300	4,300
Eldorado-Towanda	13,850	13,900
Augusta-Fox-Bush	5,050	4,950
Rainbow Bend	4,300	4,500
Russell	5,400	5,700
Greenwood County	44,750	45,000
Others	28,000	27,700
Total Kansas	107,450	107,850
Decrease		400

NORTH LOUISIANA

Homer	5,700	5,750
Haynesville	10,200	10,150
Caddo, light	10,550	10,650
Caddo, heavy	2,950	3,200
De Soto, Red River	4,050	4,100
Elm Grove	650	600
Bellevue	2,400	2,400
Cotton Valley	8,650	8,800
Urania	16,300	19,450
Total North Louisiana	61,450	65,100
Decrease		3,650

ARKANSAS

El Dorado	7,550	7,500
Smackover, light	17,100	17,200
Smackover, heavy	132,450	134,200
Stephens	2,000	1,900
Nevada	3,100	3,100
Lisbon	11,150	10,400
Total Arkansas	173,350	174,300
Decrease		950

NORTH TEXAS

	June 5	May 29
Burkburnett	11,850	11,850
Electra	16,400	16,400
Iowa Park and K-M-A	4,400	4,350
Wilbarger	13,450	12,650
Panhandle	38,700	37,000
Petrolia	500	500
Others	3,650	2,050
Archer County	32,800	32,600
Total North Texas	121,750	117,400
Increase		4,350

EAST CENTRAL TEXAS

Mexia	12,900	13,050
Currie	1,000	1,000
Richland	1,600	1,700
Corsicana-Powell	29,400	29,950
Wortham	9,200	9,550
Total East Central Texas	54,100	55,250
Decrease		1,150

WEST CENTRAL TEXAS

Stephens County	11,850	13,100
Eastland County	5,800	5,600
Desdemona	1,750	1,850
Young County	6,950	6,900
Palo Pinto County	450	400
Callahan County	3,700	5,250
Shackelford County	10,250	6,700
Reagan County	32,500	31,600
Others	12,850	10,500
Total West Central Texas	86,100	81,900
Increase		4,200

SOUTHWEST TEXAS

Luling	20,500	21,150
Mirando	8,400	7,200
Somerset	2,100	2,050
Lytton Springs	5,000	5,250
Piedras Pintas	200	200
Others	600	600
Total Southwest Texas	36,800	36,450
Increase		350

GULF COAST

Goose Creek	8,600	8,550
Hull	18,950	19,500
Saratoga	1,200	1,200
Blue Ridge	850	800
Damon Mound	850	950
Batson	1,200	1,200
West Columbia	8,100	9,200
Humble	4,000	4,000
Pierce Junction	2,850	1,200
Sour Lake	5,400	*4,000
Spindletop	4,200	6,650
Orange County	10,500	11,650
Edgerly	1,000	1,000
Evangeline	900	900
Vinton	6,400	6,400
Lockport	4,800	4,700
South Liberty	4,600	4,750
Big Creek	950	1,000
Others	2,800	2,200
Total Gulf Coast	90,850	*91,050
Decrease		200

ROCKY MOUNTAIN

WYOMING

	June 5	May 29
Salt Creek	50,050	50,900
Grass Creek	3,050	2,950
Elk Basin	600	650
Big Muddy	3,500	3,500
Lost Soldier	4,150	4,400
Rock River	2,900	3,050
Teapot Dome	1,350	1,300
Others	5,350	5,000
Total Wyoming	70,950	71,750
Decrease		800

MONTANA

Cat Creek	2,850	2,850
Sunburst	25,000	25,000
Others	150	....
Total Montana	28,000	27,850
Increase		150

COLORADO

Moffat (Craig)	3,800	4,450
Fort Colins	2,900	2,450
Florence	400	350
Others	350	500
Total Colorado	7,450	7,750
Decrease		300

NEW MEXICO

Artesia	3,000	3,000
Hogback	450	450
Rattlesnake	900	300
Total New Mexico	4,350	3,750
Increase		600
Total Rocky Mountain	110,750	111,100
Decrease		350

CALIFORNIA

Santa Fe Springs	50,000	49,500
Long Beach	108,000	106,500
Huntington Beach	45,500	45,500
Torrance	28,000	28,000
Dominguez	21,000	21,000
Rosecrans	18,500	16,500
Inglewood	48,000	50,500
Midway-Sunset	94,500	94,500
Ventura	33,500	31,600
Others	157,500	157,500
Total California	604,500	601,100
Increase		3,400
Eastern (Including Ill., Ind., Ky., Ohio, W. Va., Pa. and N. Y.)	106,500	107,000
Decrease		500

PRODUCTION SUMMARY

Production east of Rockies	1,404,950	1,409,700
Decrease		4,750
Total Production in U. S.	2,009,450	2,010,800
Decrease in U. S.		1,050

*Revised

Completions in Oklahoma and Kansas, Week Ended June 5

OKLAHOMA

Caddo County

Company	Well No.	Location	Depth	Initial Prod.
Gorton	4	C SE SW 12-5-9W	T.D.2400	50

Carter County

Company	Well No.	Location	Depth	Initial Prod.
Magnolia	1	NEc NW NW 22-2-3W	3130–3175	72
Magnolia	4	SWc NW NW 23-2-3W	2415–2944	200
Amerada	24	CEL SW SW NE 20-5-1E	1709–1728	35
Amerada	27	NW SE NE 20-5-1E	1380–1412	50
Amerada	14	SEc NW SE NW 28-5-1E	1728–1783	30
Magnolia	1	NW 2-2-3W	T.D.3976	Dry

Creek County

Company	Well No.	Location	Depth	Initial Prod.
Bartlett-Mann	2	CEL SE NW 5-19-8	1998–2013	60
Twin State	3	NEc SE SE 7-18-7	2515–2454 OWD	6
Barnsdall	2	CNL SW SE 22-17-8	2332–2355	20
Transcontinental	1	SEc NE SW 22-17-8	2302–2320	65
Interocean et al	3	NWc SE NE 27-17-8	3134–3141	455
Tibbens	9	SWc SE SE 12-14-8	2349–2397	100
Slater	11	CSL NE SE 14-18-11	1450–1524	20
Sunray	3	NWc NW SE NW 6-18-12	2173–2178	300
Sunray et al	5	NWc SW SE NW 6-18-12	2139–2140	90
Sunray et al	5	CSL NE NW 6-18-12	2005–2035	110
Lillystrand	1	SEc SW SE 11-17-10	1915–1935	30
Wright	11	NEc SE SW 24-17-10	1875–1910	40
Joemack	4	NEc NW SE 28-16-9	3443–3491 OWD	7
Tibbens	28	CSL SW NE 30-15-9	3078–3086	600
Prairie	1	NEc NW 10-17-9	1996–2013	35
Billingslea	1	NWc SW SE 28-19-8	T.D.3303	Dry
Evans	1	SEc NW 7-17-11	T.D.2947	Dry
McCullouch	1	SEc NE SW 24-15-9	T.D.3513	Dry

Garfield County—Garber

Company	Well No.	Location	Depth	Initial Prod.
Mid-Cont	18	SWc SE 12-22-4W	4391–4406	102
Mid-Cont et al	62	NEc SE SE SE 13-22-4	3599–3604	487
Mid-Cont. et al	64	NWc NE SE 13-22-4	3046–3052	380
Sinclair	31	SWc NE NE 13-22-4	4235–4247	1395
Sinclair	38	SEc NE NE 13-22-4	3080–3094	405
Sinclair	42	CSL NW SE NE 13-22-4	2735–2750	650
Roxana	7	SWc NW NW SW 18-22-3W	2775–2786 OWD	206
Roxana	8	NWc SW 18-22-3	2495–2515 OWD	160
Roxana	15	NE NW SW 18-22-3	2690–2707 OWD	707
Sinclair	26	NEc NW NW 19-22-3	2985–3004	2000
Imo	7	SWc NW SW 31-22-3	2212–2242	120

Grady County

Company	Well No.	Location	Depth	Initial Prod.
Magnolia	3	CEL SE NE NE 28-3-5W	1018–1020	21M

Hughes County

Company	Well No.	Location	Depth	Initial Prod.
Transcontinental	9	SEc NE SW 26-9-9	2975–3384	773 & 15M
Amerada	2	C NE NE NW 5-7-8	T.D.3320	Dry

Kay County—N. Braman

Company	Well No.	Location	Depth	Initial Prod.
Comar	7	SWc NW 21-29-1W	3348–3430	2242
Comar	12	SEc NW SW 21-29-1W	2352–2405	15

Kay County—S. Braman

Company	Well No.	Location	Depth	Initial Prod.
Comar	2	SWc NE 5-28-1W	2392–2394	1490

Kay County

Company	Well No.	Location	Depth	Initial Prod.
Marland	1	NEc SE 17-27-1W	T.D.3472 OWD	42

Lincoln County—Davenport

Company	Well No.	Location	Depth	Initial Prod.
Gypsy	12	NWc SE NW 11-14-5	3351–3382	410
Prairie	1	NEc SW 10-14-5	3463	Dry
Wilcox	2	NWc SE 5-12-3	T.D.1361	Dry

Muskogee County

Company	Well No.	Location	Depth	Initial Prod.
Link	6	SEc NE 29-15-15	1742–1800	8
McCormick	7	NW NE NW 34-15-18	T.D.1103	Dry
Bradley et al	2	SEc SW NW 5-14-19	688– 696	10

Nowata County

Company	Well No.	Location	Depth	Initial Prod.
Prairie	13	SEc SW 31-25-17	717	Dry

Okfuskee County

Company	Well No.	Location	Depth	Initial Prod.
Barnsdall	1	NEc NW NE 10-12-11	2636–2644	350
Hartman et al	1	SEc SW SW 22-12-11	2200–2218	15
Havel	1	NEc NW SW 23-11-11	2015–2071	15M

Okmulgee County

Company	Well No.	Location	Depth	Initial Prod.
Independent	15	C SW NE NW 27-16-12	2537–2556	100
Noble	4	SWc NW NW SW 3-15-11	1911–1965	20
Crown Cent	6	NEc SE NW 35-14-11	2311–2353	20
Swindler	6	C SW NE 25-13-11	2427–2462	200
Simms	15	CWL SW NW 31-12-12	2560–2575	15
French	4	SEc SW NE 17-11-12	3019–3021	3
Selby	1	CSL NE SE 21-15-14	1666–1679	30
Misener et al	9	CSL SW SW 16-14-14	790– 814	15
Cal Cul	4	NE SE SW 15-13-14	715– 805	2M
Shelton	1	SEc NW SE 27-13-14	1534–1608	10
Johnson et al	5	C SW NW 22-14-12	T.D.2032	Dry
Gifford	1	SWc NW NW NW 22-14-12	T.D.2795	Dry

Osage County—Burbank

Company	Well No.	Location	Depth	Initial Prod.
Phillips	1	SWc NE 12-27-5	3009–3068	125
Phillips	1	SWc 7-27-6	2943–2984	100
Phillips	3	SWc SE SW 7-27-6	2957–3004	120
Phillips	13	NWc SW 7-27-6	2959–2998	250
Carter	10	SE SW NE 20-26-6	2950–2990	400
Phillips	15	NW NE SE 20-26-6	2899–2980	125
Phillips	13	NWc SW 21-26-6	2899–2995	275
Phillips	14	NE NW SW 21-26-6	2903–3000	300
Phillips	15	NW NE SW 21-26-6	2948–2990	200
Lewis	2	NEc SE 21-26-6	2935–2965	125

Osage County

Company	Well No.	Location	Depth	Initial Prod.
Keener	12	CEL W½ E½ NE 15-29-10	1049–1080	25
Kans-Okla	15	NW NE NE 21-29-11	964– 991	15
Barnsdall	39	SE NE NW 35-29-11	869– 926	70
Tidal Osage	2	NWc SE NW 1-27-7	2530–2578	20
Owen Osage	365	SE SW SW 8-27-11	730– 744	4¼ M
Lewis	9	SE SW NW 29-25-8E	2492–2506	125
Tidal	6	SEc NW 24-24-8	2120–2160	15
Ross et al	13	CNL SW 25-23-10	1710–1755	25
Mid-Kans	1	SWc 36-22-8	2321–2340	10
Elm	14	CNL S½ N½ NE 23-22-10	1727–1759	20
Mid-Kans	1	NE SE 10-21-10	1666–1670	17
Devonian et al	2	CEL SW 27-21-10	1883–1931	4
Kewanee	5	CEL W½ E½ SW 17-21-12	1353–1386	1
Grimes-Elliott	9	SE NE SW 31-21-12	1359–1460	20
Winona	5	SW SE NE 29-20-12	2012–2019	25
Winona	6	CSL N½ S½ NE 29-20-12	1995–2016	275
Ross	1	NEc NW NW 31-28-11	T.D. 843	Dry
Oliphant et al	2	CEL NE NW 31-25-8	T.D.1102	Dry
Grimes-Elliott	1	NE NW SW 3-20-11	T.D.1358	Dry
S. S. Home	94	CNL S½ S½ SE 31-20-11	T.D.2629	Dry
Savoy	8	NE SE SW 22-20-12	T.D.2200	Dry

Pawnee County

Company	Well No.	Location	Depth	Initial Prod.
Magnolia	10	NWc SW NW 4-22-3E	4037–4072	236
Tidal	10	CEL NW NW 21-20-7	2618–2624	30
Selby	5	C W½ NE SE 23-20-8	2779–2789	45

Payne County

Company	Well No.	Location	Depth	Initial Prod.
Prairie	4	SEc NW NW 24-19-4	T.D.3741	620
Twin State	2	NWc SE NW 14-19-5	2748–2762	40
Josey	11	NEc SE SE 35-19-5	3412–3446	110
Shaffer	2	SWc 23-18-8	4228–4296	315

Pontotoc County

Company	Well No.	Location	Depth	Initial Prod.
Hughes et al	2	SEc NW SW NE 28-4-7E	T.D.1420	Dry

Seminole County

Company	Well No.	Location	Depth	Initial Prod.
Prairie	1	SWc NE SW 28-11-8	T.D.3475	Dry
Searight	1	SEc NE SE 33-10-6	4114–4124	253
Texas	1	SEc NW 10-9-5E	3556–3558	45
Independent	1	SWc NE 10-9-5	3552–3554	95
Independent	2	SWc NW 8-9-8	3300–3325	20
Roxana	1	NWc SW NW 17-9-8	3364–3388	15
Oklavania	1	NEc NW SE 18-9-8	3257–3485	50
P & R	1	SWc SE 32-8-8	4183–4194	2642
Magnolia	4	CWL SE NW NW 5-7-8	4000–4015	120
P & R	1	SWc SE NE 25-8-7	3000–3021	35

Stephens County

Company	Well No.	Location	Depth	Initial Prod.
Carter	7	NEc NW NE NW 2-2-5W	1456–1475	50
Pet. Prod	1	SEc 11-1-8W	T.D.2561	Dry
Gant et al	1	SEc 35-1-9W	T.D.3005	Dry
Murchison-Fain	1	NEc NW 36-1-8W	T.D.2505	Dry

Tulsa County

Company	Well No.	Location	Depth	Initial Prod.
Prairie	1	SWc NE 23-19-10	1736–1796	420
Red Bank	2	SWc NE SW 23-19-10	1810–1856	75
Gladys Belle	3	SEc NW NW 29-19-12	1984–2052	25
Suppees et al	1	CEL NE SW 34-19-12	T.D.2290	Dry
Dedman et al	1	SWc SE SW SW 34-18-14	T.D.2100	Dry

Wagoner County

Company	Well No.	Location	Depth	Initial Prod.
Mitchell	1	CWL NW SW 18-17-17	T.D.1094	3M
Wilson et al	1	CEL W½ NW SE 11-16-16	1592–1599	4M
Hart et al	4	NWc NE SE 18-16-15	T.D.1511	Dry

KANSAS

Butler County

Company	Well No.	Location	Depth	Initial Prod.
Empire	3	C SW SE NW 27-26-7	2140–2152	150
Magnolia	4	NWc SW NW SW 25-27-4	2026–2043	15
Amerada	6	C SE SE NW 27-27-7	2732–2758	160
Phillips	7	C NE SW SW 27-27-7	2740–2770	50
Phillips	8	C SE NW SW 27-27-7	2699–2777	75
Lewis	3	SEc NW NE 33-27-7	2731–2755	10
Manhattan	1	NEc 31-23-8	2750	Dry
Connell	3	CEL NW NW SW 27-26-7E	T.D.2750	Dry
Texas	3	C SW SE SW 22-27-7	T.D.2774	Dry

Chautauqua County

Company	Well No.	Location	Depth	Initial Prod.
Watchorn	3	C NE SW NE 28-32-10	2275–2284	15

Coffey County

Company	Well No.	Location	Depth	Initial Prod.
McMahon et al	1	C SW SW SE 5-19-14	T.D.1786	Dry

Cowley County

Company	Well No.	Location	Depth	Initial Prod.
Roxana	2½	C SW SW SE 16-34-3	1432	Dry
Benedum-Trees	5	C SW NE NE 10-31-3	3018–3025	35
Hull	15	C NE SE SE 24-32-4	2987–3055	275
Gypsy	1	C NW NE NE 25-32-4	2983–3081	15
Gypsy	1	C SW SW SW 18-32-5	2967–3015	45
Gypsy	2	CSL W½ SW 16-33-3	3184–3195	35
S. H. E. Pet	1	C NE NE NW 24-34-6	2141–2168	25

Elk County

Company	Well No.	Location	Depth	Initial Prod.
Theta	1	C SW SW SW 23-31-10	1603–1620 OWD	150

Greenwood County

Company	Well No.	Location	Depth	Initial Prod.
Davis et al	17	C NW NE SE 12-22-10	2037–2100	400
Texas	7	C SE NW SW 29-22-10	2385–2427	200
McGinnis et al	2	C SW SW SW 11-23-9	2281–2332	150
Phillips	6	C SE SW SW 15-23-9	2315–2368	135
Skelly	6	C SE NW NE 15-23-9	2310–2373	350
Mid-Kans	27	C NE SW NE 23-23-10	2115–2136	50
Skelly	2	C NW NE NW 4-23-11	1900–1937	135
Mid-Cont	4	NEc SE NE 28-23-13	1713–1749	25
Mid-Cont	5	SEc SW NE NE 28-23-13	1703–1719	40
Ritchey et al	5	C NW NW SE 19-24-11	1845–1857	10
Beacon	4	C SW NW NW 24-26-9E	2130–2155	150
Phillips	4	C SW NE SE 26-23-8	2552	Dry
Phillips	3	C NE SE NW 4-23-11	T.D.2028	Dry
Simmons et al	1	C NW SW NW 3-23-12	T.D.1875	Dry

Lyon County

Company	Well No.	Location	Depth	Initial Prod.
Manhattan	1	C SE SE NW 6-16-12	T.D.2567	Dry
SW Pet	1	C SW SW NW 35-21-10	T.D.2530	Dry
Rhodes et al	1	C NE NW SE 31-21-11	T.D.2600	Dry
Sheedy et al	6	C SW NE SW 31-21-10	2257–2297	135

Rice County

Company	Well No.	Location	Depth	Initial Prod.
Prairie	2	SEc SW 35-20-6	3396–3509	75
Prairie	1	SEc SW NW 35-20-6	T.D.3490	150

Russell County

Company	Well No.	Location	Depth	Initial Prod.
Derby et al	3	C SE NW SW 32-11-15W	2837–2848	130

Wabunsee County

Company	Well No.	Location	Depth	Initial Prod.
White Drog	1	C SW SW NE 29-14-11	T.D.2510	Dry

Completions in N. —Cent.—East Texas & Panhandle, Week Ending June 7

Anderson County

Company	Well Farm	Location Survey	Depth	Initial Prod.
Navarro	3-Greenwood	Smuller	T.D.1294	Dry

Archer County

Maer-Stanforth	1-Cross	Meade Past.	1431–1435	70
Shasta	1-Meade	Meade Past.	1457–1469	10
Cook-Reeder	1-Ray	McCoy	1132–1148	24
Gulf	7-Jeske	McCory	1175–1178	60
Gulf	3-Ashworth	Crawford Past.	1193–1212	15
Plains	1-Prideaux	Dorsey	679– 700	15
Texhoma	1-Demgen	Denton	T.D.1985	Dry
Granberry	1-Edwards	Brunner	T.D.1710	Dry
Allday	1-Hanson	Carson	T.D.1554	Dry
Consolidated	1-Hamerling	BBB&C	T.D.1506	Dry
Roxana	1-Abercrombie	SP	T.D.1328	Dry
Gulf	1-Ikard	C&P	T.D.1105	Dry
Shasta	1-Meade	Meade	T.D.1652	Dry
Gulf	3-Hayter	TEL	T.D.1501	Dry
Golding et al	1-Herrin	TEL	T.D.1015	Dry
Murchinson-Fain	1-Young	TEL	T.D.1501	Dry
Hines	1-Wilhelm	TEL	T.D.1501	Dry
Donohoe	2-Andrews	TEL	T.D. 979	Dry

Brown County

Barclay-Conway	1-Allen	Delgado	T.D.1370	Dry
Anderson et al	1-Dunn	Delgado	T.D.1204	Dry
Gillespie	2-Henson	Coffelt	T.D.1300	Dry
Thompson	1-Wooldridge	Gaines	T.D.1325	Dry
Ark Fuel	1-Eddington	Mitchell	T.D.1306	Dry
Humble	1-Kilgore	Delgado	T.D.1158	75
Barclay-Conway	9-Dunn	Delgado	1132–1145	50
Humble	10-Dunn	Delgado	1110–1118	1
Humble	3-Stover	Delgado	1133–1143	10
McCarter et al	6-Allen	Delgado	1104–1116	40
Fagg	1-Butler	McClain	1300–1318	10
Cosden	1-Westerman	Mitchell	1290–1298	20
Hughes	9-Arlege	Mitchell	1290–1310	75
Hughes	10-Arlege	Mitchell	1264–1280	250
Brown	1-Gaines	Swain	1325–1340	10
Conway	7-Chambers	Logan	1287–1299	15
Stone et al	7-Gunn	Smith	1184–1212	38
Ingleright et al	3-Eddington	Millican	1255–1264	200
Cosden	8-Williams	Coffelt	1150–1161	100
Hill-West	4-Newton	Mitchell	1171–1191	5
Hughes	1-Keller	Mitchell	1123–1143	50
Mid-West	2-Suttles	Mitchell	1144–1156	25

Callahan County

Wilkerson et al	1-Barr	Cherry	T.D.2900	Dry
Diamond	1-Terry	LAL	T.D.2410	Dry

Coleman County

Pennant	1-Neeb	Comal	T.D.1763	Dry
White Eagle	1-Casey	Cochran	T.D.1683	Dry
Gwynnup et al	6-Dibrell	Hicks	1870–1881	400
Mid-West	2-Dibrell	Hicks	1907–1927	125

Crockett County

Gulf	1-Powell	Miller	2650–2673	90
Roxana	1-Powell	EL&R	2657–2663	70

Eastland County

Bateman et al	1-Crocker	Mulloy	T.D.3080	50
Kirk-Brewer	1-Blackwell	McLennan	T.D.3400	Dry

Henderson County

Haynes	3-Bounds	Jefferies	T.D.2610	Dry

Hunt County

Gulf	1-Hicks	Bordine	T.D.4717	Dry

Hutchinson County—Panhandle

Texas	1-Cooper	I&GN	T.D.3710	Dry
Gulf	8-Dial	H&OB	2880–2898	245
Gulf	6-Dial	H&OB	2905–2920	1500
Gulf	7-Dial	H&TC	2775–2798	125
White Eagle	1-Johnson	H&TC	2099–2717	917
Phillips	2-Whittenburg	M&C	2950–2999	360
Ryan	1-Johnson	Whitley	2956–2977	505
Spring Creek	1-Smith	M&C	2691–2781	1700
Canyon	3-Whittenburg	M&C	2785–2823	8800
White Eagle	1-Smith	M&C	2820–2931	300
White Eagle	3-Smith	M&C	2707–2780	2150
Heywood et al	1-Cockrell	D&SE	2965–3040	125
Roxana	2-Smith	M&C	2915–2962	2740

Milan County

Alexander et al	1-Seilke	Sapp	T.D.3408	Dry

Mitchell County

Company	Well Farm	Location Survey	Depth	Initial Prod.
Cal Co	2-Adams	TP	2940–3075	57
Cal Co	4-Womack	TP	2910–3086	78
Magnolia	1-Watson	TP	2856–2872	45

Montague County

Flemming et al	5-Hynds	Wall	889– 891	80
Texas	2-Cunningham	Hodges	995–1002	70
Benton-Woods	4-Hynds	Wall	T.D.1080	Dry
Shock-Jamison	1-Cunningham	Bayne	T.D.1039	Dry
Flemming et al	2-Solomon	Little	T.D.1203	Dry

Navarro County

Kerr-Gilbert	1-Slaughter	Dabney	T.D.1135	Dry

Palo Pinto County

Whatley et al	1-McClure	TEL	T.D.1453	Dry

Pecos County

Smith et al	1-Devlin	Ashmore	T.D.1312	Dry

Regan County

Texas	1-Suggs	TP	T.D.3252	Dry
Zock	1-Talley	GC&SF	T.D.3212	Dry
Big Lake	64-Univ.	University	2936–2955	950
Big Lake	65-Univ.	Univ.	2934–2939	100
Big Lake	66-Univ.	Univ.	3025–3051	100
Big Lake	67-Univ.	Univ.	3070–3110	125
Texon	41-Univ.	Univ.	2896–2926	350
Texon	43-Univ.	Univ.	2940–2952	345
Texon	44-Univ.	Univ.	2929–2972	325
Texon	45-Univ.	Univ.	2945–2972	290
Texon	2-Univ.	Univ.	2460–2461	250

Shackelford County

Melton	1-Edwards	U Lands	1985–1998	27 & 2M
Humble	2-Cook	ET	1343–1359	600
Roeser-Pendleton	5-A	Sec 85	1336–1357	500
Roeser-Pendleton	6-A	Sec 85	1223–1238	800
Roeser-Pendleton	2-B	Cook	1220–1242	700
Dunigan et al	2-Elliott	LAL	672– 678	12
Milham	1-Wilie	TP	T.D. 925	Dry

Stephens County

Atkinson et al	1-Keithley	TEL	T.D.4025	Dry
Lauderdale et al	1-Sikes	TP	T.D.3405	Dry
Hanlon	1-Curry	LAL	T.D.3260	Dry
Hanlon	2-Curry	LAL	T.D.3295	Dry
Edison et al	2-Post	TP	T.D.1921	12 & 9M
Gulf	29-Ward	TP	T.D.3154	20
Gulf	14-Stoker	LAL	T.D.3143	Dry
Mid-Texas	3-Morrison	TEL	3210–3208	100

Sterling County

Wrightsman	1-Collins	TP	T.D.3013	Dry

Taylor County

Sanger	1-Norwood	LAL	T.D.3440	Dry

Throckmorton County

Associated	2-Kelley	CIR	T.D.1018	Dry

Upton County

Tidal	1-Union	GCSF	T.D.2240	Dry
Choate et al	1-Murphy	GCSF	T.D.3219	Dry

Wichita County

Armstrong	1-Ehlridge	H&GN	T.D.1800	Dry

Wilbarger County

Clark et al	1-Waggoner	MK&T	T.D.2530	Dry
Shipley et al	1-Waggoner	H&TC	T.D.1112	Dry
Wichtex	1-Waggoner	H&TC	T.D.1190	Dry
Atlantic	4-Sigler	H&TC	2468–2472	65
Humble	2-Waggoner	H&TC	2306–2320	90
Phillips	9-Waggoner	H&TC	1875–1883	267
Phillips	12-Waggoner	H&TC	1844–1865	211
Phillips	8-Waggoner	H&TC	1861–1876	23
Roxana	8-Waggoner	H&TC	2596–2616	128
Phillips	9-Waggoner	H&TC	1876–1891	56
Phillips	4-Waggoner	H&TC	2535–2554	60
Phillips	4-Waggoner	H&TC	1884–1906	335

Young County

Magnolia	2-Little	Holeman	1271–1283	114
Atlantic	3-Roching	BBB&C	1157–1169	40
Chanault-Lee	1-Roching	BBB&C	1163–1173	480
Howard	5-Stewart	Young	541– 553	20
Ramming et al	1-Stewart	Young	T.D. 615	Dry
Pandem	1-Howard	TEL	T.D.1000	Dry
Bridwell-Heydrick	1-Whitehead	TEL	T.D. 915	Dry

A. D. Miller Sons Publish Lubrication Helps

PITTSBURGH, PA., June 5.—"Good oil costs on the average for a year's use about $15—a trifling sum—but if used regularly . . . . . it will keep your car in good shape for many years." In those words the lubrication booklet recently published by A. D. Miller Sons Co., Pittsburgh, warns the car owner of the evils of careless and too infrequent oiling. "Thoughtlessness and carelessness are the two enemies of every motor car—eliminate them and you will enjoy that service your car was built to render," the booklet goes on to say.

Suggestions on engine and tractor lubrication are given. The company's special oil for Fords, known as "Castor-Oi," and its brand of Invincible oils are described. Illustrations of the things to watch in lubricating a car, brands of oil and grease to use and where to use them, are given.

Texas Building Plant at Craig

DENVER, June 4.—The Texas Co. has begun construction of a 1000-barrel refinery at Craig. It will run on crude from the northwestern Colorado pools.

The refinery will be equipped with Holmes-Manley stills and products will be distributed at points along the Denver & Salt Lake railroad and in the Denver territory. Rail rates from Craig to the intended marketing territory are more advantageous than from the company's refinery at Casper.

Several Phases of Contact Filtering Are Covered by Patents

By Paul Truesdell
N. P. N. Staff Writer

Article One

THE present situation as regards patents on various phases of contact filtering of lubricating oils is set forth in two articles, of which the accompanying is the first. Material for these articles was secured by Mr. Truesdell from refiners in California who have been active in the development of contact filtration, which lately has been given consideration in this eastern section of the country.

The second article will include a summary of the patent situation on contact filtering as seen by a man closely in touch with this development of refining practice.

REFINERS over the country are taking a great deal of interest now in the possibilities of contact filtering as against the older percolating method of decolorizing lubricating oils.

The new development in contact filtering consists of decolorizing and removing acid bodies from the oil by mixing it, at relatively high temperature, with finely divided fullers earth, Death Valley clay, montomorillonite or other clay in which the predominating substance is aluminum silicate, and later separating the clay from the oil, usually in a filter press.

Refiners who have tried this find that on many oils the contact filtering method has great advantages over the percolating method. Some of the advantages claimed are:

A plant for filtering a given amount of oil by the contact method will in general occupy much less space and cost less to build than percolating installation to handle a similar amount of oil.

A better color, using less chemicals, is obtained in the oil from contact filtering.

A much better efficiency is obtained from the clay because, in the finely divided state, it offers more active adsorptive surface than the coarser grades of earth used in percolating filters.

The process where the contact method is used is more rapid than is filtration by percolation.

Variations of Method

THERE are a number of variations of the contact filtering process as used by various refiners. Some use a dry clay in its natural state, that is, untreated. Others use a dry clay that has been treated with sulphuric acid and dried. Still others use a mudded mass of clay and water, either treated with acid or untreated. The fineness of the clay used varies slightly at different plants.

In view of the increasing interest in the contact method and increasing use of it, it would seem to be interesting to review in general some of the principal patents that have been issued covering various phases of the process.

Marvin L. Chappell and Merle M. Moore, of the Standard Oil Co. of California, James W. Weir, formerly with the Standard Oil Co. of California and now superintendent of the Ventura Refining Co.'s refinery at Fillmore, Cal., (now owned by the California Petroleum Corp.), John C. Black, formerly with the Standard Oil Co. of California and now with the Pan-American Petroleum Corp., and Paul W. Prutzman and C. J. von Bibra, of the General Petroleum Corp. were leaders in the development of contact filtering of lubricating oils.

The development work by the Standard of California began in 1916 with the discovery of deposits of aluminum silicate in California. It was carried on at the El Segundo refinery of which John C. Black was then manager and the motive for beginning it was the necessity of discovering some satisfactory filtering agent near at hand for lubricating oils that would relieve the company from heavy expense of transporting fullers earth from the east.

Pacific Coast Refiners Using It

THE Standard Oil Co. of California, Ventura Refining Co., Associated Oil Co., and the Union Oil Co. on the Pacific coast are using the contact filtering process, while the General Petroleum Corp. is not, inasmuch as the latter does not manufacture lubricating oils.

A patent issued to Paul W. Prutzman, No. 1,397,113, covers the manufacture of a filtering material from montmorillonite, a clay somewhat resembling fullers earth, found in California. The patent was assigned to the General Petroleum Corp. This patent was applied for Jan. 17, 1921, and issued Nov. 15, 1921.

Its claims follow:

1. The method of producing a decolorizing material for oils which consists in reducing the mineral montmorillonite to a plastic condition, treating the plastic material with acid, washing the acid from the mineral and pulverizing the mineral so washed.

2. The method of producing a decolorizing material for oil which consists in pulverizing the mineral montmorillonite, mixing the powdered mineral water to form a stiff paste, treating the paste by adding acid thereto, heating the paste containing the acid, washing the heated material to free the material of soluble matter and acid, drying the washed material and pulverizing the dried material.

3. The method of producing decolorizing material for oils which consists in reducing the mineral montmorillonite to a plastic condition by mixing with water, treating the plastic material with sulfuric acid in the proportion of one half pound of acid to each pound of dry mineral, washing the free acid from the treated material and pulverizing the insoluble material.

4. The method of producing a decolorizing material for the treatment of oils which consists in treating the mineral montmorillonite with acid and removing the water soluble constituents of the resulting mixture.

Interference Proceedings

THE Standard Oil Co. of California, it is understood, is prosecuting the application for a patent that contains broader claims than Patent No. 1,397,113 of the General Petroleum Corp., and has come into interference with the General's patents, claiming prior invention.

Patent No. 1,404,374, applied for Feb. 18, 1920, was issued on Jan. 24, 1922, to Marvin L. Chappell and Merle M. Moore, Standard of California chemists, and by them assigned to the Standard. The claims in this patent read:

1. The process of clarifying and improving the color of petroleum hydrocarbon oil which consists in commingling with the oil a clarifying and decolorizing agent comminuted so that substantially 97 per cent of such agent will pass through a 200-mesh sieve or screen, quickly raising the commingled oil and agent to a temperature not substantially less than 250°F. and below the peak of the decolorizing reaction, maintaining such temperature until the reaction is effected, immediately cooling such oil and agent below the temperature of rapid oxidation and separating

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Our extensive facilities for the production and transportation of Liquid Chlorine enable us to give the best of service to all refiners using our process. We also produce and market direct to the petroleum industry the following standard chemicals: Caustic Soda, in solid form and in tank cars of liquid solution containing 50% Sodium Hydroxide; Bicarbonate of Soda, for all foam type fire extinguishers; Bleaching Powder, sometimes used in making up Hypochlorite solutions; Soda Ash, Anhydrous Ammonia and Aqua Ammonia.

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the oil and agent with its adsorbed coloring matter.

2. The process of clarifying and improving the color of a hydrocarbon petroleum oil which consists in quickly raising such oil commingled with a finely divided clarifying and decolorizing agent to a temperature not substantially less than 250°F. and below the decolorizing point of chemical reaction, maintaining such heat during the period of such reaction, immediately partially cooling the intermingled oil and agent below the temperature of rapid oxidation and separating the oil and agent with its adsorbed coloring matter.

3. The process of clarifying and improving the color of a hydrocarbon petroleum oil which consists in commingling such oil with a clarifying and decolorizing agent comminuted so that approximately 97 per cent of such agent will pass through a 200-mesh screen, quickly raising the commingled oil and agent to the temperature of the desired decolorizing reaction, maintaining such temperature to effect such reaction, immediately cooling the intermingled oil and agent to such temperature as to prevent rapid oxidation and separating the agent and adsorbed coloring matter from the oil.

4. The process of clarifying and improving the color of hydrocarbon petroleum oil which consists in rapidly raising a commingled hydrocarbon oil and a clarifying and decolorizing agent to the temperature of the desired decolorizing reaction, maintaining such temperature, to effect such reaction immediately cooling the intermingled oil and agent to such a temperature as to prevent rapid oxidation, and separating the agent and adsorbed coloring matter from the oil.

5. The process of clarifying and improving the color of a hydrocarbon petroleum oil which consists in quickly raising such oil commingled with a finely divided clarifying and decolorizing agent to the temperature of the desired decolorizing reaction, immediately cooling such oil and agent below the temperature of rapid oxidation and separating the oil and agent with its adsorbed coloring matter.

6. The process of clarifying and improving the color of a hydrocarbon petroleum oil which consists in rapidly circulating through a heating chamber the oil intimately commingled with a finely comminuted clarifying and decolorizing agent to cause the reaction of said oil and agent, immediately cooling the same, to substantially prevent oxidation and separating the oil from the agent and its adsorbed matter.

7. The process of clarifying and decolorizing a hydrocarbon oil which consists in commingling the oil with a decolorizing agent, quickly heating the same to approximately 300°F., substantially maintaining the same at substantially said temperature to effect the reaction of said oil and agent, immediately cooling the same below the temperature of rapid oxidation and sepa-

rating the oil from the agent and its adsorbed matter.

Chief Features of Second Patent

THERE are three chief features in the second patent on contact filtering issued to Marvin L. Chappell and Merle M. Moore of the Standard of California and assigned by them to the company.

These are claims covering the decolorizing of oil containing a percentage of water, treating the oil without blowing it with air which causes the formation of oxidation products in the oil, and methods for separating the treated oil from the treating agent.

This second patent is No. 1,404,375, applied for and issued on the same dates as No. 1,404,374. In it the inventors state:

"While we prefer to use a filter press as the means of separating the clarifying and decolorizing agent from the oil, our process is not necessarily limited thereto, as we may use any suitable filtering means, centrifugal machine or other mechanical device by means of which the oil is obtained substantially free from the spent clarifying and decolorizing agent.

"As a clarifying and decolorizing agent we may use animal char, bone ash, fuller's earth, certain clays which have been treated with acid, such as the clays from the well-known Death Valley, Cal., deposits, or any other ordinary or preferred material suitable therefor, and which will clarify and improve the color of hydrocarbon petroleum oils."

Five Claims

THE five claims of this patent which cover excluding air from the oil by means of steam, read as follows:

1. The process of clarifying and improving the color of hydrocarbon petroleum oils which consists in commingling a hydrocarbon oil containing water and a clarifying and decolorizing agent, quickly raising the same to the temperature of the decolorizing reaction, coincidentally discharging the vaporized water to substantially exclude the contact of air with the oil undergoing treatment, maintaining such temperature to effect such reaction and then separating the agent and adsorbed coloring matter from the oil.

2. The process of clarifying and improving the color of hydrocarbon petroleum oil which consists in quickly raising a commingled hydrocarbon oil containing water and a clarifying and decolorizing agent to the temperature of the decolorizing reaction, the water present being volatilized and the resultant vapor utilized to substantially exclude the contact of air with the oil undergoing treatment, maintaining such temperature to effect such reaction, immediately cooling the inermingled oil and agent to such a temperature as to prevent rapid oxidation and then separating the agent and adsorbed coloring matter from the oil.

3. The process of clarifying and improving the color of a hydrocarbon petroleum oil which consists in commingling with the oil containing water a clarifying and decolorizing agent comminuted so that substantially 97 per cent of such agent will pass through a 200-mesh sieve or screen, quickly raising the commingled oil and agent to a temperature not substantially less than 250°F. and below the peak of the decolorizing reaction, the water present being volatilized and the resultant vapor utilized to substantially exclude the contact of air with the oil undergoing treatment, maintaining such temperature until the reaction is effected, immediately cooling such oil and agent below the temperature of rapid oxidation and separating the oil and agent with its adsorbed coloring matter.

4. The process of clarifying and improving the color of a hydrocarbon petroleum oil which consists in subjecting such oil containing water commingled with a finely divided clarifying and decolorizing agent to a temperature not substantially less than 250°F. and below the temperature of the peak of the decolorizing reaction, the water present being volatilized and the resultant vapor utilized to substantially exclude the contact of air with the oil undergoing treatment, maintaining such heat during the period of such reaction, immediately partially cooling the intermingled oil and agent below the temperature of rapid oxidation and separating the oil and agent with its adsorbed coloring matter.

5. The process of clarifying and improving the color of a hydrocarbon petroleum oil which consists in rapidly circulating through a heating chamber the oil containing water and intimately commingled with a finely comminuted clarifying and decolorizing agent to cause the reaction of said oil and agent, the water present being volatilized and the resultant vapor utilized to substantially exclude the contact of air with the oil undergoing treatment, immediately cooling the same to substantially prevent oxidation and separating the oil from the agent and adsorbed matter.

Another Prutzman Patent

ANOTHER patent was issued to Prutzman and Carl J. von Bibra, also assigned to the General Petroleum Corp., No. 1,471,201. This patent was applied for Sept. 2, 1922, and granted Oct. 16, 1923. It covers the "Method of Producing and Material for the Treatment of Oils", and contains five claims which are as follows:

1. The method of producing a decolorizing and purifying agent for oils which consists in first forming a mudded mass from non-spent mineral earth, then subjecting the said mudded mass to the action of an acid for the separation therefrom of acid-soluble bodies, removing the acid and reaction products from the insoluble portion of the said mass by the application of water, thickening the mass by the withdrawal of excess wash water therefrom and maintaining the said treated body until used in a mudded condition to prevent contact of air with the solid particles thereof.

2. The method of producing a plastic body for the intermixture with oils to be treated for the decolorization and purification thereof, which consists in forming a mudded mass from non-spent mineral earth of the montmorillonite type, subjecting the mass so formed to the action of an acid for the removal of certain acid-soluble bodies therefrom, washing the acid and reaction products from the insoluble portion of the mass by the application of water thereto, withdrawing excess water therefrom and maintaining the treated earth in a mudded condition for intermixture with the oil to be treated without an exposure of the solid particles thereof to the atmosphere.

3. The method of producing a decolorizing agent for oils, which resides in first forming a mudded mass of non-spent mineral earth, treating the mass so formed with acid for the removal of acid-soluble bodies therefrom, washing out most of the acid and reaction products from the mudded mineral earth, reducing the washed mass to a thick, plastic condition, or mud adapted to have the remaining water evaporated therefrom when incorporated with oil raised to a temperature above that of the boiling point of water and maintaining the treated earth in its mudded condition until utilized for intermixture with the oil to be treated.

4. A decolorizing agent for oils, the same comprising a plastic mass or mud of non-spent mineral earth from which acid soluble bodies have been removed and the acid and reaction products washed therefrom and excess moisture removed and maintained in a plastic or mudded condition for intermixture with the oil to be treated without an exposure of the solid particles thereof to the atmosphere.

5. An oil decolorizing agent, the same comprising a mudded mass of non-spent mineral earth freed of acid-soluble bodies and of acid and of acid reaction products.

Patent on Decolorizing

ANOTHER patent, No. 1,562,001, was issued to Prutzman and von Bibra Nov. 17, 1925, application having been filed Sept. 2, 1922, and this patent was also assigned to the General Petroleum Corp. It contains but one claim, as follows:

1. The method of decolorizing oil which consists in preparing a mass of pulverulent solid decolorizing material in the form of an aqueous mud, whereby air is excluded from the pores of the decolorant, mixing such mud with the oil to be decolorized and heating the mixture until the water is driven out of the aqueous mud, whereby the solid decolorizing material is brought into intimate contact with the oil and finally separating the spent solid decolorant from the decolorized oil..

SAGERTOWN, PA.—M. P. Hecker, proprietor of Hecker's Garage on Perry highway here, is now handling That Good Gulf gasoline, product of the Gulf Refining Co., Pittsburgh.

The refiner who uses the Dubbs Cracking Process can contemplate the rising prices of gas oil and light distillate without regret or remorse

Increasing demand for these fractions for household burners, Diesel engines and other relatively essential uses will fix the prices of these fractions above their profitable use for cracking

But the refiner with a cracking process limited to cracking only gas oil, will continue to pay advancing

Research Reveals Anti-Knock and Other Qualities of Natural Gasolines

By Drs. E. H. Leslie and G. G. Brown,
Professors of Chemical Engineering, University of Michigan

Delivered before the fifth annual convention of the Association of Natural Gasoline Manufacturers, Tulsa, May 6

THE motoring public is generally aware of the fact that ease of starting and acceleration are due largely to the more volatile components in gasoline. "Detonation" was not recongnized, except as a "carbon knock," until about 12 years ago, when the refineries began to include more and more of the heavier fractions in commercial gasoline, steadily raising the end point from 300° F. to 437° F., compelling the manufacturers of motor vehicles to build engines of lower compression pressures.

Natural gasoline, being composed only of the more volatile components of Federal Specification gasoline, and used generally to increase the volatility of motor fuel, is, by virtue of its volatility, essentially the cream of the gasoline fraction.

For the tests reported in this paper, straight run Natural gasoline, obtained through a local dealer from the Champlin Refining Co., Enid, made from Billings crude (car A.H.C.V. 493 shipped April 15, 1926), having the A.S.T.M. distillation curve as shown by curve 2, Figure 1, and A.P.I. gravity 57.5°, was used as a standard blending stock.

For acceleration and power tests this straight run stock was blended with natural gasoline obtained through the Staebler Oil Co., Ann Arbor, from the Liquefied Petroleum & Gasoline Company of Tulsa and shipped from Eram, Oklahoma, hereafter designated as natural gasoline sample number 1, having the A. S. T.M. distillation curve as shown by curve 6, Figure 1, and A.P.I. gravity of 77.1° and 94 per cent recovery. In addition to these two fuels, blends containing 10, 25 and 50 per cent by volume of natural gasoline No. 1 were made, having the distillation curves as shown by curves 3, 4, and 5, figure 1, and A.P.I. gravities of 60.4, 63.0 and 66.9. Curve 1, showing the Federal Specification gasoline, is given for reference in Figure 1 and all other figures showing distillation curves.

Starting and Acceleration Tests

THE first tests conducted were for ease of starting and freedom from backfiring. These tests were made on Franklin air-cooled, six-cylinder, valve-in-head engine, driving an air dynamometer. It would be desirable to make these tests on a cold engine to represent actual starting conditions, but this is practically impossible because the engine becomes warm while the test is being made, making consistent results on a cold engine out of the question. For this reason these tests were made after the engine was at operating temperature. But in order to approximate starting conditions, the exhaust manifold was not connected to the hot spot on the intake manifold as is the standard method of operation. This method of testing with the intake manifold unheated is designated on the curves by "heat off."

The starting test was conducted by setting the throttle at ¼ open, closing the choke, and pressing the starter button until the first explosion occurred when the engine would operate under its own power. The ease, or rather difficulty, of starting is indicated by the number of revolutions of the engine before the first explosion. The tests were repeated six times and averaged, with the results shown in Table I and by the lower curve of Figure 2.

Table 1

Percentage of Natural Gasoline No. 1 in blend	Number of Revolutions Required to Start Engine, Throttle ¼ Open, Choke Closed
0	4.0
10	3.0
25	2.5
50	2.0
100	1.5

The tests to determine tendency to backfire consisted in determining the slowest speed at which the engine could be operated without a sudden opening of the thottle to the full open position causing a backfire. The data obtained in this series of tests are given in Table II and are represented by the upper curve in Figure 2. It was found that the engine could not be operated at less than 1000 R. P. M. with the straight run gasoline without causing a backfire when the throttle was suddenly opened, but that the engine could be operated at 200 R.P.M. when using natural gasoline No. 1 without causing a backfire upon sudden opening of the throttle.

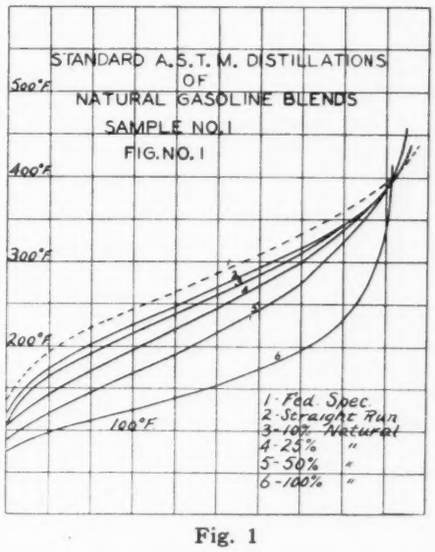

Fig. 1

Table 2

Percentage of Natural Gasoline No. 1 in blend	Minimum R. P. M. Required to Prevent Backfiring upon Sudden Opening of Throttle to Full Open Position
0	1000
10	870
25	830
50	750
100	200

Method of Acceleration Tests

LABORATORY acceleration tests were made with the same fuels on the same engine, with the manifold unheated. These tests consisted in measuring the time required to accelerate the engine and air dynamometer from 700 R.P.M. to 1600 R.P.M. The initial speed of 700 R.P.M. was chosen because it was the lowest speed at which the engine would operate smoothly on the straight run gasoline.

These data, reported in Table III and Figure 3, represent the average of six check determinations. The time required to accelerate this engine with the unheated manifold from 700 R.P.M. to 1600 R.P.M. when using straight run gasoline was almost 0.08 minutes (4⅘ seconds). The time required decreased steadily with increasing natural gasoline in the fuel blend to 0.053 minutes (3⅕ seconds), when using straight natural gasoline.

Further acceleration tests were conducted with the exhaust heat on the intake manifold, as is the usual method for this engine. With the intake manifold heated, the engine could be operated smoothly at 300 R.P.M. on the straight run gasoline. Accordingly, these tests consisted in measuring the time required to accelerate the engine and dynamometer from 300 R.P.M. to 1600 R.P.M. The results are given in Table III and Figure 3.

Larger paddles were then bolted on the arms of the air dynamometer to in-

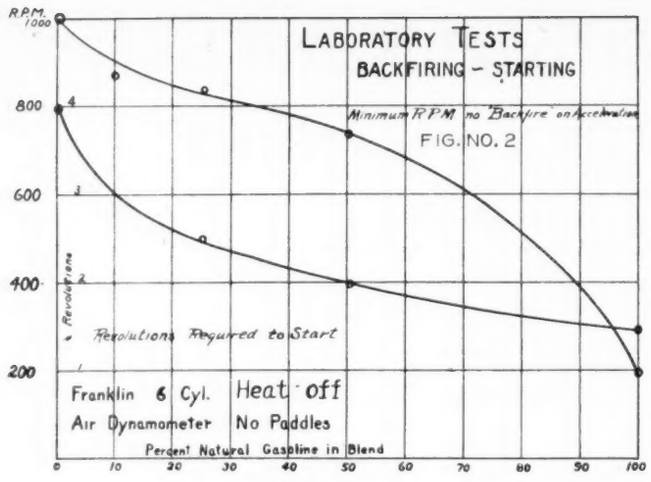

Fig. 2

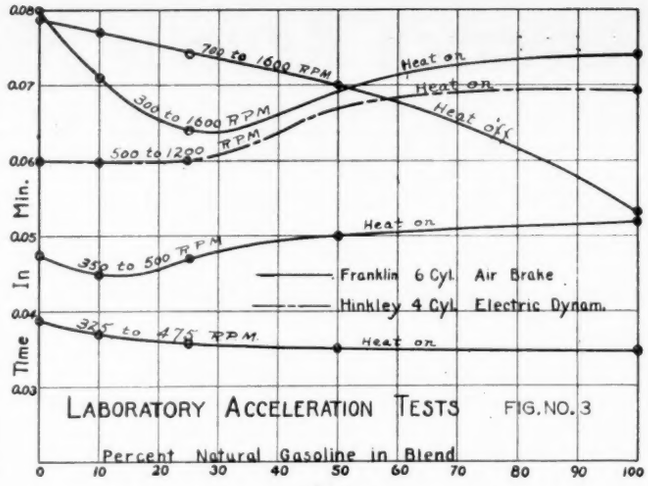

Fig. 3

crease the load on the engine. Acceleration tests were then made in the same manner as described, from 350 to 500 R.P.M. and from 325 to 475 R.P.M.

The data obtained from these tests are tabulated in Table III and plotted in Figure 3.

Table 3

Percentage of Natural Gasoline No. 1 in Blend	Minutes Required to Accelerate: Moderate Load, Cold Manifold, From 700 to 1600 R. P. M.	Moderate Load, Hot Manifold, From 300 to 1600 R. P. M.	Heavy Load, Hot Manifold, From 350 to 500 R. P. M.	Heavy Load, Hot Manifold, From 325 to 475 R. P. M.
0	0.079	0.08	0.0475	0.039
10	0.077	0.071	0.045	0.037
25	0.074	0.064	0.047	0.036
50	0.070	0.069	0.05	0.035
100	0.053	0.074	0.052	0.035

Facts Discovered

Comparison of these data brings out several interesting facts.

1. Time required to accelerate to relatively high speeds, 1600 R.P.M., under light or moderate load, and at very low speeds, is less for natural gasoline than for straight run gasoline.
2. With a heated manifold the best acceleration is obtained with 30 per cent natural gasoline in the blend when the engine is operating under moderate load, and with 15 per cent natural gasoline in the blend when operating at moderate loads but at low speeds.
3. With a heated manifold and accelerating from very slow speeds, the best results are obtained with about 50 per cent of natural gasoline in the blend.
4. A heated manifold gives better acceleration except with very volatile fuel such as straight natural gasoline or those blends containing large amounts of natural gasoline.

It must be kept in mind that the conditions throughout all tests were such as usually obtain in modern automobile engines built and adjusted for ordinary commercial gasoline, and that engine or carburetor characteristics play an important part. For this reason further tests on engines of other types were considered necessary to show the effect of fuel volatility independent of engine characteristics.

Laboratory and Road Tests

THE data given in Table IV and plotted as the broken line in Figure 3 were obtained by determining the time required to accelerate a four cylinder, ell head, water cooled Hinkley truck engine from 500 to 1200 R.P.M. The engine was governed at 1200 R.P.M. so that this speed could not be exceeded. The manifold was of the ramshorn type and heated. This type of manifold has pockets in which the less volatile liquid fuel collects at low gas velocities and is swept out of the manifold into the cylinders at the higher gas velocities accompanying higher speeds.

For this reason the distribution of the less volatile fuel is poor, giving results which differ somewhat from those obtained on the six-cylinder air-cooled engine. However, this test verifies the conclusion that for considerations of acceleration the volatility should not exceed that corresponding to 30 per cent natural gasoline if the intake manifold is heated by the full heat of the exhaust.

Actual road tests for acceleration were made with one of the University's test cars, a Studebaker Standard Six chassis, ell head, water-cooled engine. These tests were made by observing the time required to accelerate from 10 to 40 miles per hour and from 5 to 25 miles per hour with a heated manifold. In order to eliminate any wind effect, the test was conducted by driving up and down a chosen section of level highway and averaging the results. The third and fourth columns of Table IV and the curves of Figure 4 give the results of these tests.

Table 4

Percentage of Natural Gasoline No. 1 in blend	Minutes to Accelerate: 4 Cylinder Engine Heat on, 500 to 1200 R. P. M.	6 Cylinder Chassis Heat on, 10 to 40 miles hour	6 Cylinder Chassis Heat on, 5 to 25 miles hour
0	.060	.400	.200
10	.060	.387	1.88
25	.060	.385	1.95
50	.067	.390	.200
100	.069	.410	.200

The results of the road tests are exactly equivalent to those obtained in the laboratory, and verify the conclusion that with a manifold heated by the full heat of the exhaust, a fuel volatility corresponding to that of a 30 per cent natural gasoline blend gives the best acceleration to relatively high speeds, and that a fuel volatility corresponding to that of a 15 per cent. natural gasoline blend gives the best acceleration at low speeds.

The three engines used in the above tests were equipped with manifolds heated by the full heat of the exhaust. Further tests were made on a Buick six-cylinder, valve-in-head, water-cooled engine equipped with an intake manifold heated by the full heat of the exhaust only when the throttle is nearly closed. As the throttle is opened, a butterfly valve in the exhaust pipe is opened automatically, allowing the exhaust gases to pass directly through the exhaust pipe without heating the intake manifold. Acceleration tests were made on this engine in the same manner as has been described. The results (Table V and Figure 5) are quite different from those obtained on engines in which the entire heat of the exhaust strikes the intake manifold. In the tests reported in Table V and plotted in Figure 5 "Heat off" indicates no exhaust heat on the intake manifold, and "Heat on" indicates a variable amount of heat decreasing with opening throttle in the manner described.

The power developed at 1000 R.P.M. with open throttle was determined by

means of the electric dynamometer. As part of the exhaust gases by-pass the intake maniold at open throttle, "Heat on" indicates less heat than in the case of the other engines.

Table 5

Percentage of natural gasoline No. 1 in blend	Minutes to accelerate 500 R. P. M. 1400 R. P. M. Heat off	Heat on	Horse Power at 1000 R. P. M. Heat off	Heat on
0	0.120	0.112	28.4	27.2
10	0.109	0.1085	28.7	27.9
25	0.108	0.102	28.0	28.1
50	0.104	0.101	27.6	27.9
100	0.102	0.100	27.3	27.7

These results show a 12 per cent increase in acceleration with a heated manifold as the fuel volatility is increased from that corresponding to the straight run gasoline to that corresponding to straight natural gasoline, and a similar somewhat larger increase in acceleration with a cold manifold. Table III shows a 33 per cent increase in acceleration from 700 R.P.M. to 1600 R.P.M. with a cold manifold on the air cooled engine. The differences in the case of the hot manifold may be largely explained as due to the differences in manifold heating control. With cold manifolds the results are similar differing in degree only, and may be explained as due to the differences in manifold heating control. With cold manifolds the results are similar, differing in degree only, and may be explained as due to the different engine characteristics and to the different speeds at which the tests were run.

Relative Power Output

AS is to be expected, the power readings indicate a greater power output with a cold manifold, at least with the less volatile fuel. The reason for the power increase in the case of more volatile fuel, when using a heated manifold, is not clear, unless it be due to the carburetor characteristics or adjustment. The curves of Figure 5 indicate that under the conditions of test the power output may be slightly increased by using a more volatile fuel than the straight run gasoline, but that power may be slightly decreased if the fuel is too volatile.

About 30 per cent of natural gasoline in the blend gave the maximum power with a heated manifold and about 10 per cent of natural gasoline gave the maximum power with a cold manifold. It will be noticed that the decrease in power when using straight natural gasoline is negligible with a heated manifold and more noticeable with a cold manifold. These results need further verification before they may be taken as general truths.

The acceleration tests on engines of four different types are sufficiently complete to allow a few generalizations.

1. With a cold manifold, or a manifold heated to a limited degree only, the best acceleration is obtained with the most volatile fuel.
2. With a manifold exposed to the full heat of the exhaust, the best acceleration is obtained with a fuel having a volatility equivalent to that of a 15 to 30 per cent natural gasoline blend, depending upon whether acceleration to moderate or high peeds, respectively, is desired.
3. For acceleration at extremely low speeds a more volatile fuel is desirable.
4. A manifold heated at least to a limited extent gives better acceleration with all fuels tested.

Anti-Knock Properties

TESTING the knocking properties of a fuel is at best rather difficult, and, as no tentative standard method for making these tests is recognized, the results reported by various investigators, using different methods, are frequently in poor agreement, and not comparable at all. For these reasons it is necessary to outline in some detail the method used for determining the anti-knock properties of natural gasoline.

A Delco Light engine equipped with a high compression head (ratio 6.5 to 1), a standard Ford carburetor, bouncing pin, and Prony brake to aid in controlling the speed, was used in all the tests. The engine is an air-cooled, valve-in-head, single cylinder engine, mounted with direct driven generator on a common base. The vaporizer supplied as standard equipment with the engine, having no float chamber, needle valve, or throttle, was found unsatisfactory and was replaced by the standard Ford carburetor.

The bouncing pin, developed by the Research Laboratories of the General Motors Corp., is a satisfactory device for measuring the intensity of engine knock, and is widely used for this purpose. Essentially, the bouncing pin consists of a heavy pin resting on a small piston flush with the inner surface of the engine head.

The piston is backed by a heavy spring, so that during normal combustion the pin moves up and down only a few thousandths of an inch, resting on the small piston. But when detonation occurs in the combustion chamber the bouncing pin is thrown upward clear of the piston, with an amplitude dependent upon the intensity of the knock.

In order to measure the amplitude of motion of the bouncing pin, and thereby the knock intensity, electrical contacts are placed above the pin, which are pushed together when the pin is thrown free of the piston, making a longer contact as the intensity of detonation increases. These contacts are connected in series with a 110 volt, D.C. circuit, a 50 watt lamp, and an electrolytic cell filled with 10 per cent sulphuric acid. The volume of electrolytic gas produced in the cell per unit of time is equivalent to the intensity of the engine knock, and the time required to produce a unit quantity of gas varies inversely as the intensity of the knock.

Methods of Using Bouncing Pin

AS we wished to measure the tendency of different fuels to knock, and not the relative intensity of the knock produced, the bouncing pin was used in these tests to indicate when a knock of a predetermined intensity was set up in the engine.

A series of tests consisted in running the engine with a constant throttle, con-

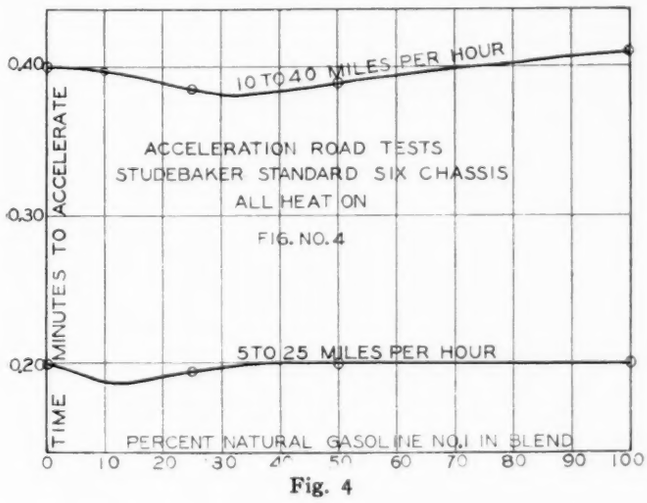
0.40
0.30
0.20
TIME MINUTES TO ACCELERATE
10 TO 40 MILES PER HOUR
ACCELERATION ROAD TESTS
STUDEBAKER STANDARD SIX CHASSIS
ALL HEAT ON
FIG. NO. 4
5 TO 25 MILES PER HOUR
PERCENT NATURAL GASOLINE NO. 1 IN BLEND
0 10 20 30 40 50 60 70 80 90 100

Fig. 4

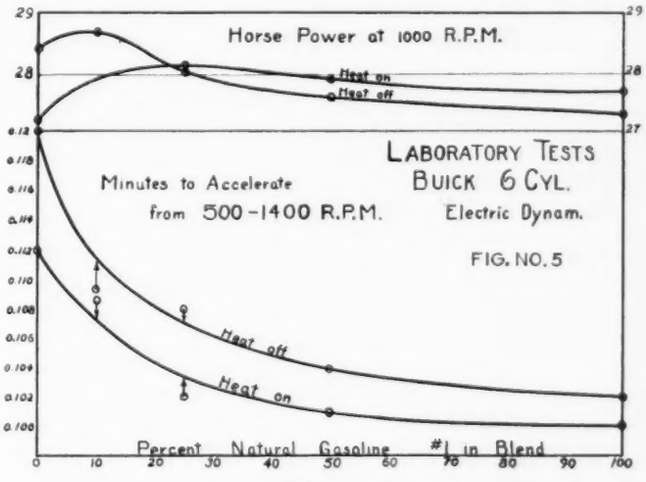

Fig. 5

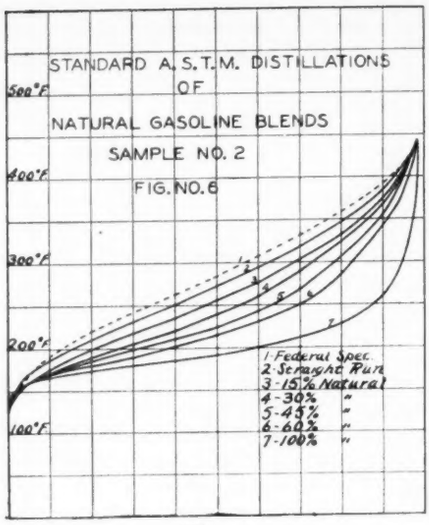

Fig. 6

stant carburetor adjustment, at a constant speed of 1200 revolutions per minute, with the different fuels, and measuring the degrees spark advance before top dead center that would cause the engine to knock with the predetermined intensity as indicated by the bouncing pin. For comparison, benzol blends were run alternately with the natural gasoline blends, and the final results represent the relative effectiveness of natural gasoline as compared to benzol in preventing engine knocking when blended with straight run Mid-Continent gasoline.

In starting a series of knocking tests, the engine was first run at full load for apout 45 minutes to get it thoroughly warmed to operating temperature. Then the carburetor and spark advance were adjusted carefully until the engine was knocking mildly but consistently on straight run gasoline. The bouncing pin was carefully cleaned and adjusted to give ½ cubic centimeter of gas in 50 seconds. The carburetor bowl was then drained and the supply of natural gasoline blend connected. The spark advance was then adjusted with everything else constant, until ½ cubic centimeter of gas was collected in 50 seconds. The bowl was then drained and a check run made on straight run gasoline. If consistent results were obtained a benzol blend was then tested in the same manner. If the results were inconsistent the data were rejected and the runs repeated.

For making knocking tests three different samples of natural gasoline were blended with straight run gasoline, and compared with similar benzol blends. Sample number one having an A.P.I. gravity of 77.1, with 94 per cent recovery, was made into ten, twenty-five, and fifty per cent blends as shown in Figure 1.

Sample number two was a special research sample supplied by the Phillips Petroleum Co., and represents the residue obtained after removing the butanes and pentanes from Oklahoma natural gasoline by careful fractionation. This sample had an A.P.I. gravity of 65.2, with 100 per cent recovery and an A.S.T.M. distillation as shown by curve 7 in Figure 6. Fifteen, 30, 45, and 60 per cent blends were made as indicated in Figure 6.

Sample number 3 is a composite sample of stabilized gasoline obtained from a number of plants, and also supplied by the Phillips Petroleum Co. This sample had an A.P.I. gravity of 83.9, a recovery

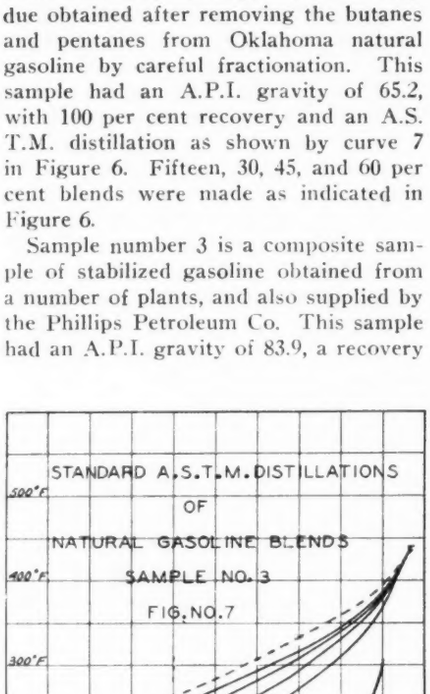

Fig. 7

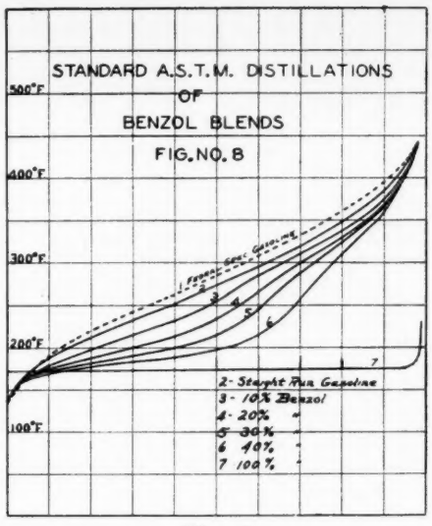

Fig. 8

of 90 per cent, and an A.S.T.M. distillation as shown by curve 6, Figure 7. It is the most volatile sample tested and shows the best anti-knock properties. Blend of 15, 30, and 45 per cent were made as indicated in Figure 7.

For comparison 10, 20, 30, and 40 per cent benzol blends were made as indicated by the A.S.T.M. distillation curves shown in Figure 8.

Two Series of Runs

At least two series of runs were made with each series of natural gasoline blends, under different carburetor and throttle adjustments. This was done to eliminate so far as possible any peculiar conditions of engine or atmosphere that might exist on one day or at one particular set of adjustments. It is sometimes surprising what a relatively powerful influence a slight change in conditions will have. Opening a window, or changing the temperature or weather conditions, will frequently have as much effect as 10 per cent of benzol.

Having explained the method of making knocking tests, the detailed data so obtained will not be presented in tabular form. Figures 9 and 10 indicate how the data were plotted to determine the relative values of benzol and natural gasoline as anti-knock materials. These

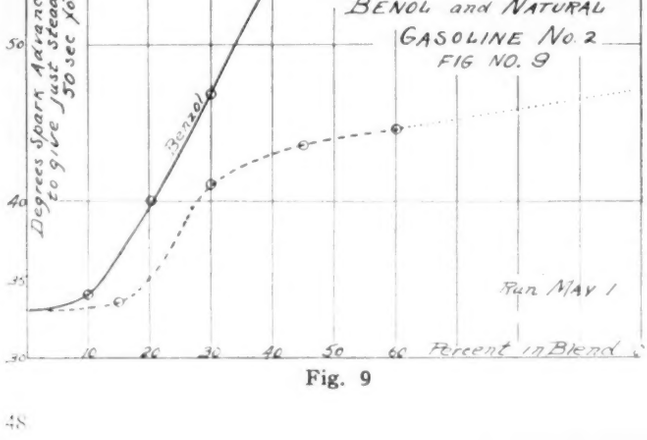

Fig. 9

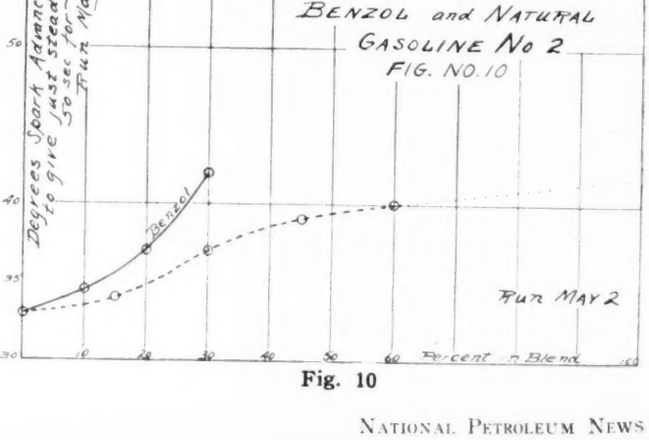

Fig. 10

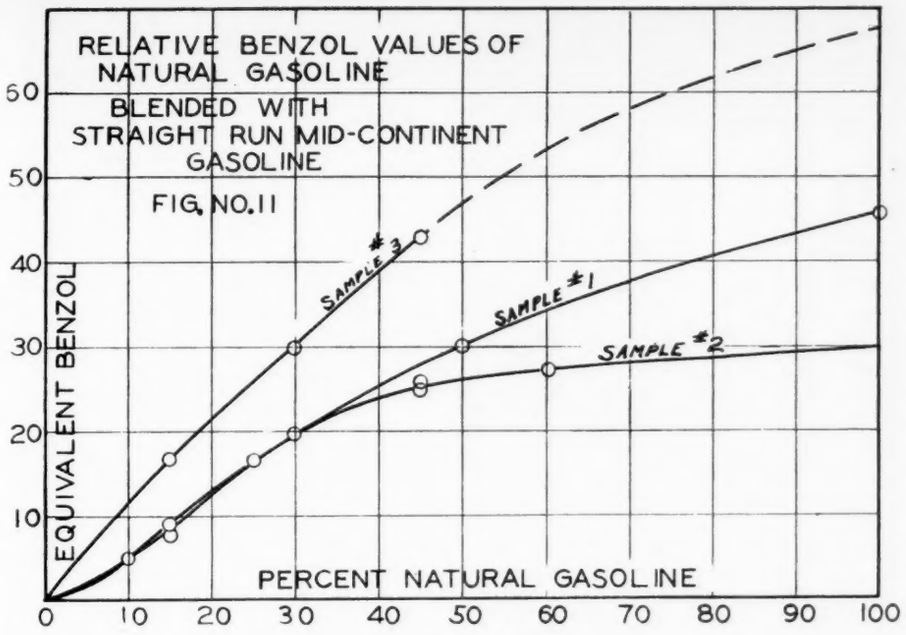

Fig. 11

figures represent the data obtained on different days under different conditions, but with the same fuels. Although different degrees of spark advance were obtained, the relative values of benzol and natural gasoline as obtained in different series of runs are practically identical.

These data and other similar data obtained for the other blends, plotted against equivalent benzol value in Figure 11, show the consistency of this method and the relative values of the different natural gasolines as compared to benzol when blended with straight run Mid-Continent gasoline.

Natural gasoline sample number three is the most volatile, and shows the best anti-knock properties. Sample number one, a less volatile gasoline, has a somewhat similar curve lower on the scale. Sample two, which contains only the last 30 per cent of natural gasoline, seems to possess anti-knock properties identical with sample one up to thirty per cent in the blend, but in greater amounts sample two shows less anti-knock properties than sample one.

Natural Gasolines Differed

BECAUSE the natural gasolines used are very different in volatility, sample two containing no butane or pentane and sample three containing relatively large amounts of these volatile compounds, it seemed that somewhat more consistent results might be obtained if benzol equivalent were plotted against some value representing volatility.

For lack of a better value, the benzol equivalents are plotted against the temperature at which 50 per cent of the fuel is distilled in the A.S.T.M. distillation. Because all the loss on distillation may be assumed as composed of the more volatile part of the distillate, the fifty per cent point is figured backward from the upper end of the distillation curve. Figure 12 gives the results of these computations in graphical form. The fifty per cent point is not a true measure of volatility, and the compositions of the natural gasolines are very different, but Figure 12 indicates at least qualitatively the importance of volatility as a measure of anti-knock properties.

In order to indicate the different results that might be expected from different methods of making knocking tests, a complete plot of all data taken in one series is given as Figur 13. The degrees spark advance corresponds roughly to the compression ratio and represents the knocking tendency of the engine. The seconds to collect one-half cubic centimeter in the burette of the bouncing pin device varies inversely as the intensity of knock.

If the fuels were compared at 40 degrees spark advance, by measuring the intensity of knock, entirely different results would be obtained than if the fuels were compared at constant knock intensity of 45 seconds by measuring the spark advance. Tabulations on different bases are given in Table 6 in order of anti-knock value.

Another interesting point is brought out by the data plotted in Figure 13. Note that a 30 per cent natural gasoline blend detonates at a 45 second intensity when the spark is set at 42 degrees advance, and that a 20 per cent benzol blend knocks with the same intensity under the same conditions. But at a knock intensity corresponding to 60 seconds the 30 per cent natural gasoline blend will stand 39.7 degrees spark advance and the benzol only 37.5 degrees. At 37 degrees spark advance a 30 per cent natural gasoline blend will cause the bouncing pin to register ½ cubic centimeter in 100 seconds, and a 20 per cent benzol blend will register the same amount of knocking in 65 seconds, although the two blends show the same properties at 42 degrees spark advance. Similar tendencies are evident with all natural gasoline and benzol blends tested.

Intensity of Knock Increases

IN general we may say that the intensity of knock, as engine conditions are made worse, increases more rapidly with natural gasoline than with benzol, and also the intensity of knock decreases more rapidly with natural gasoline as engine conditions are improved. As on our adjustment, 50 seconds registered for ½ cubic centimeter corresponds to a steady but not violent knock, longer periods than 50 seconds really

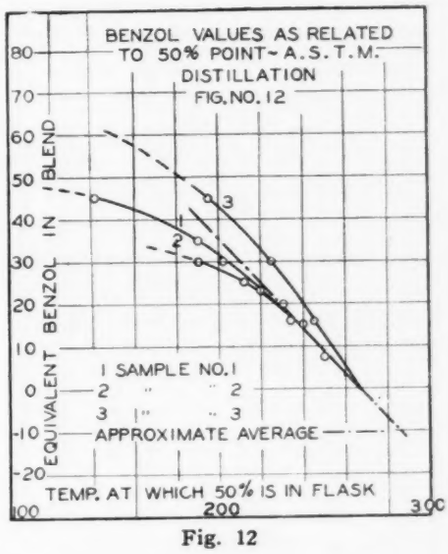

Fig. 12

Table 6

Knock Intensity at 40° Spark	Relative Anti-Knock Value of Blends, Based on Spark Advance for Intense knock, 40 sec.	Spark Advance for Steady knock, 50 sec.
100% Natural	100% Natural	100% Natural
60% Natural	30% Benzol	30% Benzol
30% Benzol	60% Natural	60% Natural
45% Natural	45% Natural	45% Natural
30% Natural	20% Benzol	30% Natural
25% Natural	30% Natural	25% Natural
20% Benzol	25% Natural	20% Benzol
10% Benzol	10% Benzol	10% Benzol
15% Natural	15% Natural	15% Natural
Straight run	Straight run	Straight run

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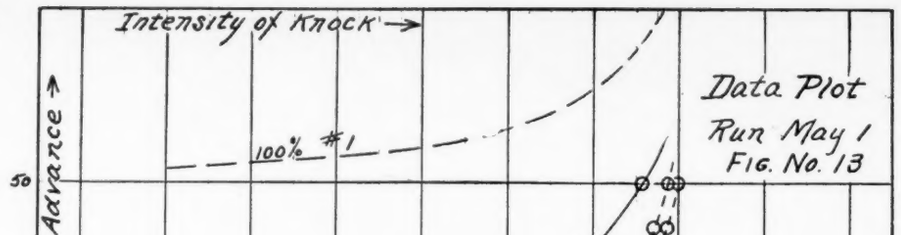


Fig. 13

represent so called "rough running" rather than "detonation." These data lead to the conclusion that natural gasoline blends should give a smoother running engine than benzol blends of equal anti-knock properties.

In general we are justified in concluding that natural gasoline blended with straight run Mid-Continent gasoline is equivalent to two-thirds as much benzol in blends containing not more than fifty per cent of natural gasoline.

Gulf Coastal Water Shipments, April Compared With Mar.

(All figures in barrels of 42 gallons)

Company—Port	Coastwise Refined March	Coastwise Refined April	Export Refined March	Export Refined April
Standard of Louisiana				
Baton Rouge	1,317,018.00	938,733.00	813,147.00	21,108.00
The Texas Company				
Port Arthur	1,372,494.00	1,194,296.00	280,612.00	601,825.00
Gulf Refining Co.				
Port Arthur	2,626,744.21	2,035,526.39	54,196.86	265,304.38
Magnolia Petroleum Co.				
Beaumont	1,762,580.76	1,460,020.66*	.....	.....
Sinclair Refining Co.				
Houston	175,709.64	302,106.37	13,801.78	82,999.00
Humble Oil & Refining Co.				
Baytown	761,465.22	507,940.25	375,382.88	725,236.64
Marland Oil Co.				
Texas City	.....	.....	61,377.24	162,066.56
Atlantic Oil Producing Co.				
Atreco	194,172.90	194,746.39	.....	.....
Galena Signal Oil Co.				
Houston	110,000.00	76,000.00	55,000.00	128,000.00
Deepwater Oil Refineries				
Houston	50,000.00	NONE	.....	NONE
Keen & Woolf Oil Co.				
Houston	.....	.....	.....	42,000.00
Totals	8,370,184.73	6,709,369.06	1,653,517.76	2,228,539.58
	Coastwise Crude		**Export Crude**	
Standard of Louisiana				
Baton Rouge	1,326,338.00	1,470,031.00	.....	.....
The Texas Company				
Port Arthur	211,893.00	255,026.00	.....	.....
Gulf Refining Co.				
Port Arthur	370,197.09	270,445.12	.....	.....
Sinclair Refining Co.				
Houston	410,344.76	386,816.10	.....	.....
Humble Oil & Refining Co.				
Texas City	607,943.00	1,097,391.00	.....	.....
Neches Terminal	177,644.00	62,686.00	.....	.....
Baytown	836,168.00	695,588.00	53,576.00	54,062.00
Marland Oil Co.				
Texas City	395,104.16	785,755.65	.....	.....
Atlantic Oil Producing Co.				
Port Arthur	210,543.64	241,297.15	.....	.....
Atreco	376,769.57	262,038.82	.....	.....
Smiths Bluff	117,360.90	49,052.12	.....	.....
Sun Oil Company				
Sabine Pass	.....	.....	.....	.....
Vacuum Oil Company				
Texas City	.....	.....	.....	.....
Crown Central Petroleum Co.				
Houston	.....	76,880.40	.....	.....
Totals	5,040,306.12	5,653,007.36	53,576.00	54,062.00

*Magnolia Petroleum Company makes no distinction in reports between coastwise and export shipments.

Next N. P. M. A. Convention May Be Down East

Staff Special

CHICAGO, June 4.—Officers and directors of the National Petroleum Marketers Association now are seriously considering holding the annual autumn convention somewhere in the east. The membership of the organization has grown most rapidly in the eastern half of the United States during the last three years. Now the representation along the Atlantic coast and especially in New England is a strong influence in the association.

L. V. Nicholas, president of the association stated this week that the eastern members were "building a fire" under the organization in their attempt to hold the convention in the east and that he had dispatched Eva Arnstein, secretary of the N. P. M. A. to Atlantic City to return a report on convention facilities there. He went to New York himself in the latter part of the week and probably will meet some of the eastern directors there. However, no decision will be made until later.

It has been the custom of the N. P. M. A. for a long time to hold its springtime industrial conferences in Chicago and take the big fall conventions elsewhere. A great many of these have been held in western cities. Kansas City, St. Louis, Milwaukeee and Louisville have had the convention in recent years. The one in Cleveland in 1924 is the only time it has gone east and that was a highly successful meeting.

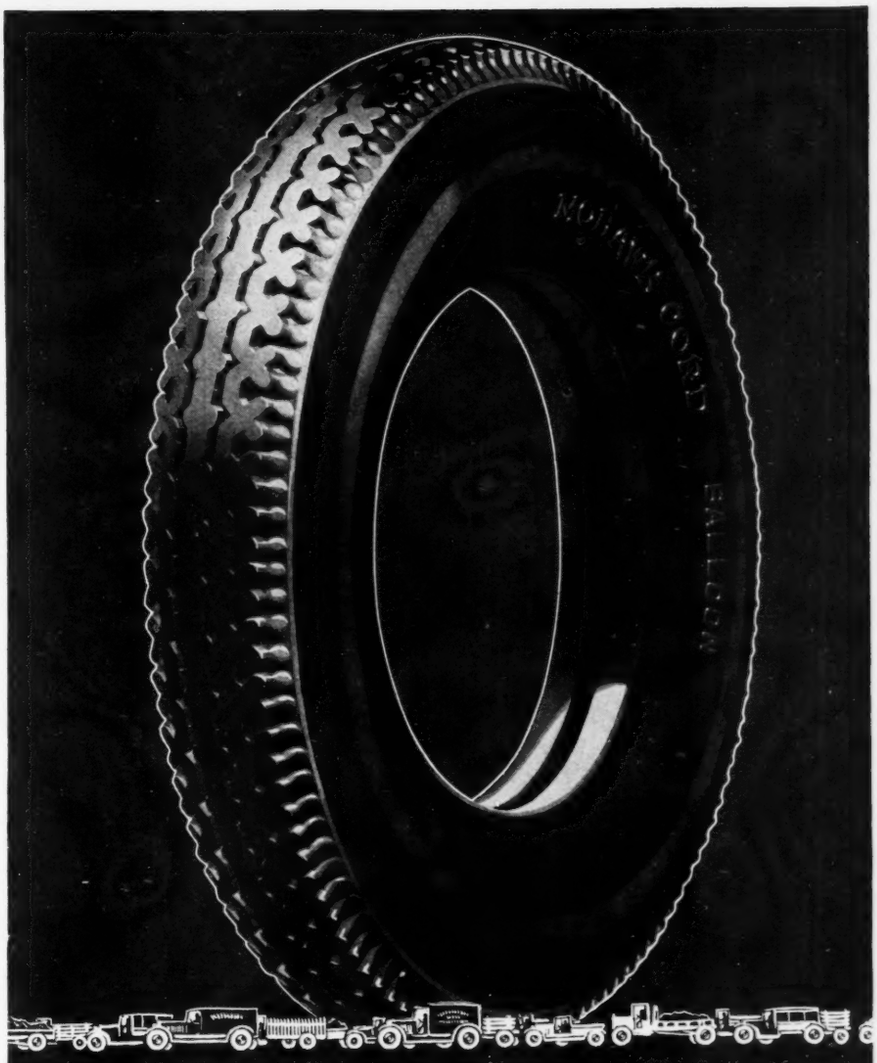
Second in importance among the calls for the fall meeting is the insistence from Ohio jobbers who want the meeting held in Cincinnati. Mr. Nicholas believes some Atlantic coast point would satisfy the Ohio group as a second choice.

Oil Marketer Has Tire Business

MONROE, LA.—The Kellogg Oil Co., Inc., which operates a filling station and tire and accessory store in connection here, has filed incorporation papers with the Southern Tire Co., Inc., of New Orleans for a separate corporation. The tire business will be conducted under the name of the Southern Tire Co., Inc., of Monroe. Kelly Springfield and Penn-Vacuum tires will be handled, according to C. L. Kellogg, an official of the Kellogg company.

Incorporators of the new company are: Martin Gilman, New Orleans, president; C. L. Kellogg, vice president; and E. A. Dubdian, secretary and treasurer.

HOUSTON, June 5.—Prairie Oil & Gas Co. has purchased the Conway Brothers properties in the south end of the Cross Cut field, northern Brown county, for total consideration of $450,000. The properties include 325 acres of leaseholds, three drilling wells, 15 producing wells and 485 barrels daily of production.



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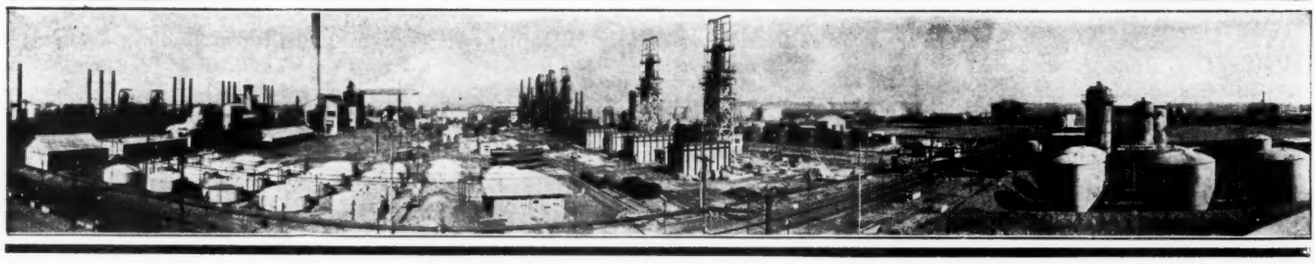


Putnam Alemite's new lubrication plant run in connection with a garage in Canton. The pit is 40 feet wide, allowing wide space between cars in the runways. The pits are all deep enough so that operators can work on the cars without stooping.

Ruining His Automobile Started This Man In Successful Greasing Business

CLEVELAND, June 6

EXPERIENCE may be a dear teacher but her lessons are frequently worth the tuition fee. She taught one lesson to George P. Putnam of Canton, Ohio, which resulted in prying him loose from the business of selling bonds and started him on the road to a highly successful automobile oiling and greasing business.

The growth of his greasing enterprise from a beginning of zero to the point where Mr. Putnam is ready to expand it beyond the limits of Canton and establish similar service in other nearby cities is a matter of less than three years.

His career shows what can be done by a man with only a nodding acquaintance with automobiles from a mechanical standpoint and with no knowledge of the oil and grease business, just by using his head—and his hands.

In the summer of of 1923, Mr. Putnam, then vice president of the biggest investment banking house in Canton, bought an automobile which cost him about $4000. For a few months the car ran well, but when the speedometer showed a mileage of less than 4000, it began to give trouble.

Ruined at 4000 Miles

FINALLY it was turned over to a mechanic to be fixed up and the mechanic reported, after examination, that the car was practically a ruin. The reason for its untimely failure, the mechanic told Mr. Putnam, was lack of proper lubrication. The crank case oil had been not changed frequently enough and the grease cups had been sadly neglected.

This set Mr. Putnam to thinking. He figured that he was just an average automobile owner and driver and that he had treated his car in just about the same manner as thousands of motorists all over the state of Ohio and the country at large. He was not unusually careless or neglectful, he believed. That meant there were thousands of motorists whose cars were going downhill and whose investments in them were being rapidly destroyed through lack of proper lubrication.

Mr. Putnam reasoned further that there was a profitable and useful business in Canton for the man who would do a real job of lubricating automobiles, and thus maintaining their value and their efficiency, and he decided he was the man for whom this business was waiting. So he resigned from the investment company. He made a deal with a garage on a side street, not a very convenient or promising location, for the use of a small amount of floor space and he and his brother set to work with pick and shovel to dig and concrete a pit in which greasing could be done. The pit was large enough to take two cars at a time.

It was in October, 1923, when the Putnams were ready to start business. Mr. Putnam did not have much money to put into advertising, but he realized that he could not expect many people to let him grease their cars unless he first let them know he was in that business. He got his first customers by using the telephone.

Soliciting by Telephone

HE would call up one man after another, strangers to him but whom he knew to be automobile owners. To each man he told the story, that he was ready and willing to do a real job of oiling and greasing. A good many of his telephone prospects took him up and drove their cars to his greasing pit. All the greasing was done by himself and his brother.

Such a good job did he do that he says almost all of those original customers are now regular patrons of his

A Specialist in Lubrication

HOW one company takes its patrons into its confidence in the motor car oiling and greasing business is told in the accompanying article. Its advertising is very specific in the exact points on the chassis, the engine, and so on, which receive attention and the particular kind of oil or grease used is told in the advertising also.

This company's sales letters are gotten out to impress the motorist with the fact that this company is a specialist in the oiling and greasing business. They contain helpful suggestions to the car owner whether he brings his car in to the company's greasing station or not.

—write for a copy of the new DIAGRAM BOOK

ECONOMY
BARREL RACKS
Portable and Stationary
—Standard Equipment
Economy Engineering Co.
2687 W. Van Buren St., Chicago
342 Madison Ave., New York

GULF
Refining
Company

General Sales Offices
PITTSBURGH, PA.
District Sales Offices
New York, Houston, Atlanta,
Boston, New Orleans, Tampa.
Philadelphia

REFINERS OF OKLAHOMA
TEXAS AND LOUISIANA

PETROLEUM

REFINED OIL
GASOLINE
NAPHTHA
GAS OILS
PARAFFINE WAX
ASPHALT

Fuel Oil--Lubricating Oils

CYLINDER ENGINE
CORDAGE

RED AND PALE PARAFFINE OILS

station. But there were times when he got only one or two cars a day. He was not discouraged by the small amount of business he got at the start, first because he was not advertised very well and also it was cold weather. He stayed in this location 10 months, by which time he had built up his business to such a point that he was sure he was on the right track and had outgrown his plant.

From time to time he did some newspaper advertising in modest space and this helped considerably in building up the trade. When the Allegheny parking garage, one of the biggest storage garages in town, opened up last January, Putnam Alemite Service, as Mr. Putnam calls his company, had pits for three cars installed in one side of the garage, easily accessible to drivers from the street. In front of the garage was an accessory store, but this lasted only eight months.

Putnam's Alemite Service business grew so that the company was forced to take over the space occupied by the accessory store and add it to the greasing plant. Now of 24,000 cars registered in Canton, the Putnam Alemite has more than 3000 as regular customers.

In January of this year, when the company absorbed the added space, it invited the public through a full page ad in the Sunday editions of the Canton newspapers, to inspect the new greasing plant, advertising it as the third largest greasing station in the country. This is a fact, Mr. Putnam says, the Putnam Alemite being surpassed only by the Western Oil Refining Co. station and that of the Plaza Oil Co., both in Indianapolis.

Announced in Big Space

THE full page ad that announced the opening of the enlarged greasing station was headed: "You are expected to inspect the third largest—but finest—lubricating station in the country. 14,519 automobiles were lubricated at our station in 1925. We ask you to expect perfect lubrication when you bring your car to us.

"Eighty per cent of all repairs on moving parts come from lack of proper lubrication.

"Thorough chassis lubrication is that process of greasing or oiling the entire bearing surface of every chassis bearing on your car.

"We guarantee this.

"Here is what we lubricate on your car and the kinds of grease and oil we do it with.

Chassis

"Shackle bolts, king bolts, tie rod bolts, brake cams, drive shaft roller bearings, spring seats, torque arms, water pump, fan, steering gear housing, drive shaft sleeve, pinion gear, clutch thrust, clutch thrust bearing, starter shaft, rear axle roller bearings, brake equalizers, drag link, distributor shaft, pedal shafts, steering arm bearing, engine suspension bearing.

"Charm lubricant is used. This is an

oil base grease. Will not absorb water, therefore will not pit bearings.

Front Wheels

"Whittimore's special front wheel grease only, used. This grease is of such a nature that it will not run. It is recognized all over the world as the proper grease for front wheel bearings. A specific grease for each specific bearing.

Universal Joints

"Special Spicer universal grease is used on these bearings. This grease is of a fibrous nature and will not be thrown out by the centrifugal motion of these parts.

"A recognized grease for these bearings. It is, of course, applied by high pressure methods.

Transmission and Differential

"We use Charm gear lubricant. It has the highest viscosity of any known grease. This winter lubricant will not channel at 12 below zero.

"This means perfect lubrication for gears and bearings in all winter temperatures. These gear cases are always checked for the quantity, quality and consistency of the grease in them, thus assuring you that, when your car leaves our station, these parts are receiving proper lubrication. We have in our pits a device that enables us to drain and refill these cases in 30 minutes. There is no extra charge for labor.

Crankcase

"Allegheny oils, Pennzoil, Quaker State oils.

"All of these oils are 100 per cent pure Pennsylvania, assuring you of the best lubrication possible for your motor.

"A special light oil, also Pennsylvania, is used for flushing out your motor. We do not use kerosene for this purpose.

"We are equipped to thaw out frozen crankcases and remove all of the old oil as well as the water produced by condensation. Mobiloil, Veedol.

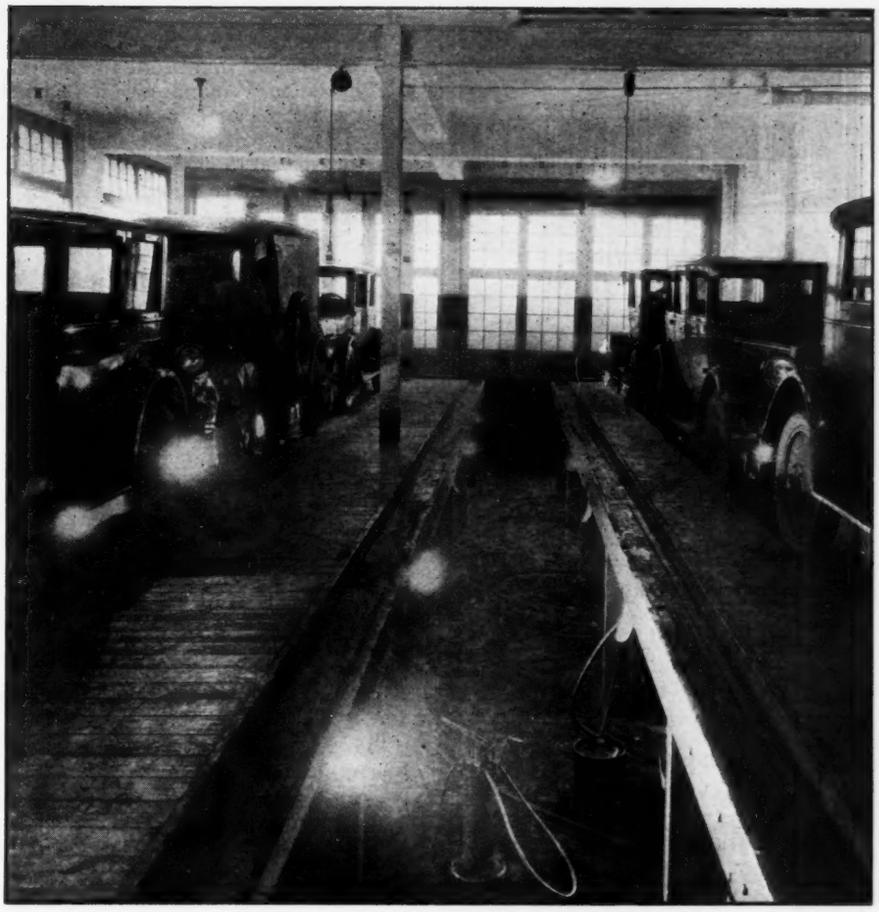
Oiling

"DISTRIBUTOR, generator, brake cams, overhead valves, brake equalizers, accelerator rod joints, brake rod joints. Every joint not equipped with a lubricating cup is given a thorough bath of oil.

"Nothing is missed."

As will be seen, this advertising takes the customer into the confidence of the greasing company, tells him exactly what to expect in a lubricating job and what materials are used for the purpose. Doubtless many motorists did not know their cars possessed all the parts enumerated in the ad.

The opening of the station was a matter of such interest that the Sunday issue in which this ad appeared carried a large amount of news matter relative to the station and its business. The manager of the Canton Automobile Club also gave out an interview in which he urged upon the motorist the advantage of lubricating his car thoroughly every 500 miles and soothed the mind of the motoring public on the fear that the oil companies recommend frequent changes of crankcase oil merely for the sake of promoting their sales.



The lighting arrangement has been worked out in the Putnam's lubrication station so that good light is available regardless as to where the car is standing over the pit, or what particular spot the operator is working at. The manner in which the pits are illuminated to throw good light on the chassis of a car is shown.

Now the company's plant occupies a space 40 feet by 120, with a concrete pit 40 feet wide and deep enough to make it convenient to work on the cars without bending over. Tracks for three cars run across the pits with broad walkways between. One track is wide enough to accommodate the largest truck.

The motor oils are stored in 12 tanks of 120 gallons capacity each, equipped with Marvel pumps. They are stored on the floor level instead of in the pits, thereby leaving the pits clear for the men to work. There are 12 men now always on the job, with a service manager and his assistant, whose business it is to check the work of the men and see that no car goes out until the job is complete.

All the key men are experienced automobile mechanics and always on the lookout in going over a car, for loose nuts or bolts or anything out of order. If it is a loose screw or nut that can be fixed with a few turns with a screwdriver or wrench they fix it. If it is more serious they make a note of it on the car's ticket so that the owner is warned of the condition.

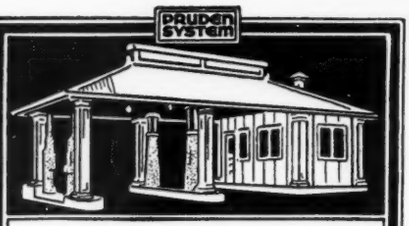
All Equipment in Duplicate

The plant is equipped with a small Hoffman quarter horsepower steam boiler fired by gas for use in thawing out crankcases, cleaning transmission and differential housings and so on. There are a number of Alemite compressors and guns for use on other types of pressure grease systems. Everything is in duplicate, grease guns, oil cans, and so on, so that anything wanted by any of the men is ready to his hand and no time is lost hunting for it. There are even several circuits of lights so that, if one circuit is put out of business, there is still light enough to go on with the work. In addition to the oiling and greasing, the attendants will put water in batteries and inflate tires.

Besides the advertising carried in the newspapers, the Putnam Alemite Service has three big billboards on the three main roads leading into Canton, announcing their location and service. These boards have brought in business to such an extent the company is now planning to erect several more this summer.

But probably more effective in getting business than either newspaper or billboard advertising is the personal solicitation by letter that is systematically carried on. All license applications are watched and when a prospect gets a letter from the company, it shows an interest in him that even extends to knowing the make of car he drives.

These letters are the work of Bert Busche, advertising manager.



Beautiful
Steel Buildings

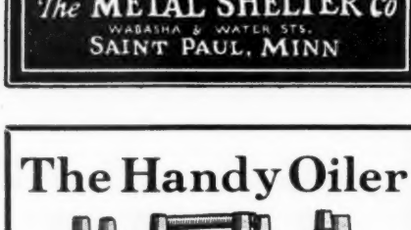
YOU can't realize what attractiveness of design is possible in steel until you have our circular illustrating **PRUDEN SYSTEM** copper-alloy galvanized steel buildings. *Send for it.*

Pruden System buildings, by their beauty of appearance, invite patronage.
They are the most practical type of service station buildings, in every respect.

They are strong and lasting, with the slightest of depreciation through years of service. They are absolutely fireproof, being made *entirely* of steel. They are quickly erected, and portable. They can be perfectly insulated against heat and cold. And they are low in price.

The **METAL SHELTER** *Co*
WABASHA & WATER STS.
SAINT PAUL, MINN

The Handy Oiler



THE public today demands that you give them quick, clean service. This you can do by dispensing your lubricating oils with Handy Oilers, and improve the most valuable asset to your business, "Service".

Handy Oilers are marked to pass the inspection of the Division of Weights and Measures in each state where sold.

These prices are subject to the regular discounts.

LIST PRICES

Complete Outfit	**$10.00**
Handy Oiler Container and Spout	**1.00**
Basket	**2.50**
Metal Spout and Breather Pipe	**.60**
Glass Container Only	**.45**
Gasket	**.05**
Dust Cap	**.10**

Manufactured by

Handy Oiler Co.

Danville, Indiana

Purchase from your jobber if possible. If he will not supply you, we will ship direct.

Here is a sample letter to a Ford owner:

"You bought your Ford for low cost transportation. Why not give it a chance?

"It is not oil or gas or tires that run up operating costs. It's repairs. It's that proverbial "dimeing you to death" we so much hear about that does it. Eighty per cent of your repairs will come from lack of proper chassis lubrication.

Making Repeat Business

"FOR $1.75 we will equip the vital points on your Ford with Alemite. Then by proper and regular lubrication it will give many miles of dependable service with a minimum of depreciation.

"Drive your car in, Mr. Jones, and watch us work. Then judge for yourself whether we know our business or not."

Another to a new Ford owner:

"That new Ford of yours needs lubrication—you know that, so do we. If properly lubricated every 500 miles it will give in return dependable service and minimum depreciation. Your car is new now. Thorough chassis lubrication will keep it that way.

"We specialize in thorough chassis lubrication. Drive your car in. Watch us work and then judge for yourself whether we know our business or not."

This to the owner of a new Buick:

"You are certainly interested enough in that new Buick of yours to want to keep it new mechanically.

"Nothing but proper lubrication will do this. We do only that kind. When your car leaves our lubricating station every bearing point is covered with a film of lubricant. There is no metal to metal contact. Scientifically your car is properly lubricated.

"Drive your car in, Mr. Jones, and watch us work. Then judge for yourself whether we know our business or not."

Another letter:

"There is an easy way to cut repair bills. Not only easy but inexpensive.

Grease Cuts Driving Costs

"EIGHTY per cent of all repairs on moving parts come from one cause, lack of proper lubrication. The Yellow Cab Co., of Chicago, found that, by regularly and properly lubricating their cabs, they cut their operating cost from 1 to 1¼ cents per mile.

"Your Buick, if regularly and properly lubricated as we do it, will not only give you the results they received but will, in addition, operate more dependably with a minimum of depreciation."

Here is a letter sent out to customers with the coming of cold weather:

"Some people change to heavy underwear in the winter. Some people do not. This is a case of personal feeling.

"Some people change the lubricant in their transmission and differential in winter. Some people do not. This is a case of not knowing.

"When your car stands in the cold the lubricant becomes stiff and upon starting, the gears plow a path threw the thick compound but the bearings grind away because the lubricant is not fluid enough to throw to the moving parts. This sooner or later means new bearings in these cases.

"That is, unless you have had winter lubricant put in. We can make this change in 30 minutes. Better drive your Buick in, Mr. Jones."

Another bearing on winter driving, addressed to a customer who has not been in at the time the station record shows he should have been:

"Winter driving need not bring on costly repair bills. Not if you treat your car right. Here's the whole story of keeping down winter operating costs.

"1—Keep your battery charged.

"2—Keep enough alcohol in your radiator.

"3—Change oil more often because of gasoline dilution.

"4—Have your chassis properly lubricated every 500 miles.

"Our records show that your car has not been lubricated since Dec. 1. Your speedometer registered 5,164 miles on that date. If you have driven 500 miles since then it should be lubricated right now.

"Better drive your Buick in, Mr. Jones."

And here is a form of letter used for physicians:

"Dear Doctor Jones:

"Last night before I closed my desk I made a note to write to you concerning a certain matter which I think will be of interest to you.

"This is what is commonly known as the age of specialization. Everyone is taking one particular line of business and following it closely. We would no more think of diagnosing the aches and pains of one of your patients than you would of refusing to answer one of their night calls.

"But—when you drive your car to us suffering from lubrication pains, we are quick to take care of the ailment and put it into proper working shape to give you the service that you expect from it.

"Drive your car in, Dr. Jones, before you go to the office and we will have it ready for you, thoroughly lubricated, when your office hours are over."

And watermarked on the letterheads that carry these letters is the company's slogan, "Every 500 Miles."

The charge made for chassis lubrication of Ford, Chevrolet, Overland, Maxwell and Chrysler 4 cars is $1.25. Buick, Studebaker, Nash and cars of that type are greased for $1.75. Cadillacs, Packards, Marmons, Lincolns and so on, are $2.25.

TULSA, June 4.—Hollis P. Porter, chief engineer with the Gypsy Oil Co., will attend the mid-year meeting of the American Petroleum Institute Standardization Committees in Colorado Springs, starting June 15. Mr. Porter is a member of the recently organized committee on Gages and Gaging Practices.

S. America Fast Growing in Importance As Future Crude Supply

By Lawrence E. Smith
N. P. N. Staff Writer

NEW YORK, June 6

IT is difficult for the average oil man in this country to work up much enthusiasm over South America. He has been hearing about the magnificent possibilities of that part of the world so long and, from outward appearances, so little has happened, that he is sometimes inclined to believe some one has been warning against a fictitious wolf, as did the foolish shepherd in the third reader. Development there has now reached the stage it must be considered seriously by the entire industry in this country.

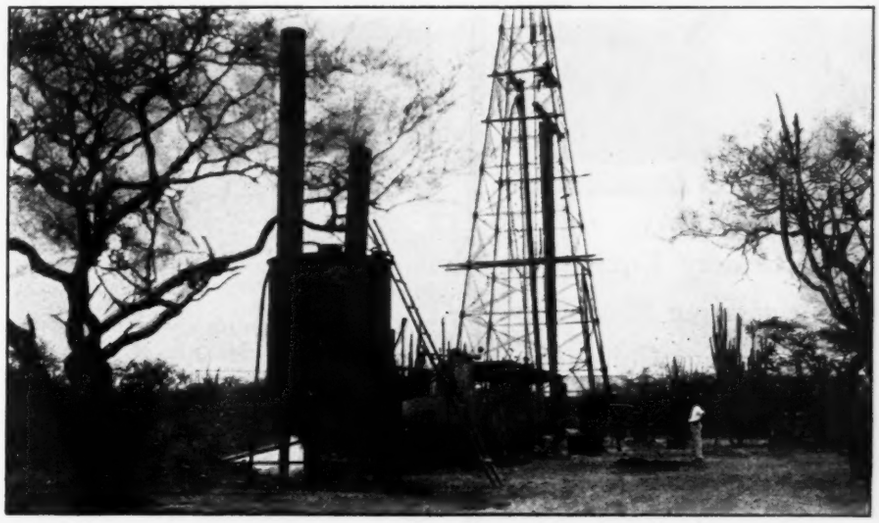
The northern part of South America—Venezuela and Colombia—has today available about 125,000 barrels of oil daily and of this amount about half soon will be coming to the United States and to Canada. Early in July the International Petroleum Co., Ltd., will begin tanker shipments from the port of Cartagena, where storage is now being filled through the 350-mile 10-inch line which joins the Tropical Oil Co.'s big field to the markets of the world. The line capacity is 30,000 barrels per day.

Two companies are shipping Venezuelan oil into the United States. These are the Lago Petroleum Corp. and the Venezuelan Gulf Oil Co. The latter has in operation a 10,000-barrel refinery at Bayonne and the capacity of this will be doubled by July 1. The two companies are pursuing an active development and wildcatting campaign—Gulf has recently opened Venezuela's newest field—and can be counted upon to proceed steadily in accordance with a definite program. Both have considerable proved acreage and probably can increase production.

Important as is Colombia, and increasingly important as it is certain to be, Venezuela possesses the competitive features and, owing to certain superiorities of operating conditions, such as better petroleum laws and an administration which encourages development, is more in the public eye. Colombia has stood in her own light for a long while and, although a new president who is to be inaugurated in August is reported to see more clearly the advantages of development of natural resources, legislative changes will have to be made before the country is anything like as attractive as is Venezuela.

The Maracaibo Basin

WILDCATTING proceeds in various parts of the interior of Venezuela and leasing activities is marked, but for the rest of this year the old reliable Lake Maracaibo Basin will continue to hold major economic interest, chiefly because transportation service is already in existence and any new fields which come in will be immediately available to markets and because of an acreage ownership situation existent there which is not duplicated elsewhere.



A Venezuelan wildcat. This is the test of the Omnium Oil Co. in the District of Urdaneta.

Acreage in Venezuela is generally in large blocks—large as we understand the term in this country. Around this lake shore, the ownership is such that whoever brings in a new field affects immediately two other operators. Reference to the accompanying map shows a strip one kilometer five-eighths of a mile wide extending entirely around the lake. This marine zone, as it is known, is held by several companies and operating agreements have been made between some owners and other companies. The Gulf has been particularly active in making such agreements and as a result was represented in the La Rosa and Ambrosia fields and lately has opened up Lagunillas, a third field of the type familiar to operators through La Rosa developments.

It has so happened that all the fields around the lake thus far have been opened in an area where everything inland for miles is held by the Shell interests. La Rosa was opened by the Venezuelan Oil Concessions, Ltd., a Shell subsidiary. The rather hasty drilling that occurred there in 1925 was due to the competitive condition. Lago holds everything in the lake bed—3,000,000 acres in all—except the kilometer strip around the edge. Gulf, at La Rosa, through contract with the Creole Syndicate, held the strip and Shell offset what the others drilled.

Ambrosia was brought in by the Lago company and the Gulf has brought in Lagunillas. Honors are even in discovery by the three companies that have supplied the chief excitement in Venezuela thus far.

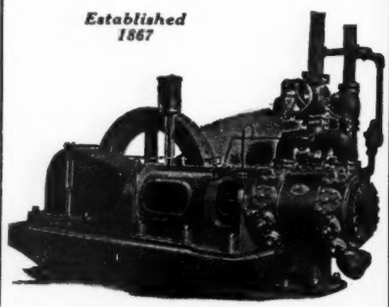
V. O. C. has not shown much disposition thus far to wildcat along the lake shore. It brought in the biggest well ever drilled in Venezuela and that opened the La Rosa field. Since that time it has played a defensive game. Gulf and Lago have other ideas about the situation. They have use for all the oil they can find on their holdings. Lago, which now considers it has proven 10,000 acres in the lake bed, or has 10,000 proven acres, will keep two strings busy at wildcatting from now on. It will run 12 strings on proven acreage. Its tests will, for the greatest part, be located in the water at sites where structure is believed to exist, data having been obtained from inland geological work.

Offset Decline in Mexico

IF measurement is made in terms of months—or in the number of months remaining in this year—it probably is safe to say that the markets in the United States will not be disturbed by Venezuela and Colombia. But, if the observer wishes to look ahead a little farther, it is not difficult to see enough oil coming in from the tropics to more

The Vilter Mfg. Co.
1136 Clinton Street, Milwaukee, Wis.

Established 1867



Vilter High Speed Refrigerator Machine

Oil Refinery Equipment
Refrigerating Machinery
Oil Cooling Coils and
Gasoline Condensers

We will gladly figure on your requirements

Branch Offices in All Principal Cities

Get a Binder

for

National Petroleum News

YOU can get one specially made to hold 26 issues of National Petroleum News — made of imitation leather and inexpensive.

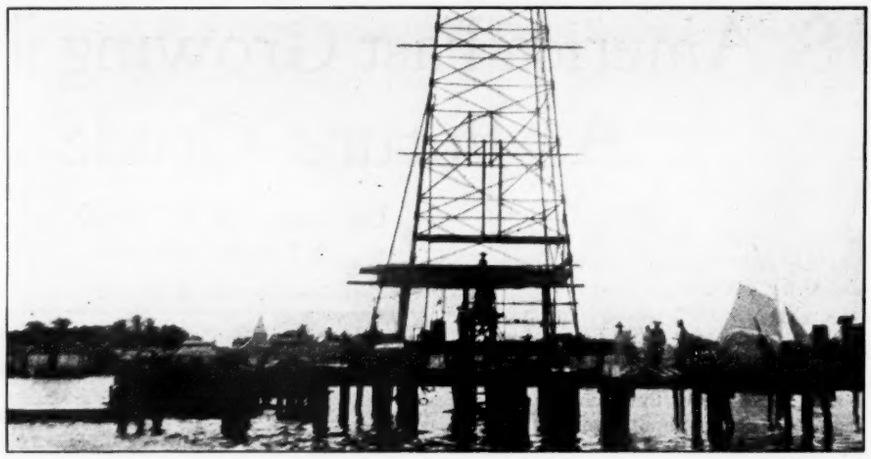
It enables you to keep the weekly issues of National Petroleum News in good order and easily accessible.

Send check or money order for $2 and your N.P.N. binder will go to you promptly.

NATIONAL PETROLEUM NEWS
803 Caxton Building
Cleveland, Ohio

Name.....

Address.....



Venezuela's newest field, Lagunillas, was opened by the well shown in the picture above. This was the test of the Venezuelan Gulf Oil Co.

than offset the declining imports from Mexico.

Venezuela is no such slow developing country as was Mexico, or Colombia. Fields thus far have required only a short length of pipe line, run through country not difficult for pipe liners, to reach water. Tankers of the sea-going variety cannot enter the lake, but this handicap has been overcome by bringing in a host of shallow-draft tankers, boats which draw less than 12 feet of water, and moving the oil to terminal storage on the sea outside the lake. Lago is now about to put into commission two more of these small tankers and Gulf has three under construction. This will bring the fleets of the two companies up to where they can move out about 30,000 and 40,000 barrels daily respectively, to where it can be taken by the ocean-going tankers.

In the enumeration of reasons why it is well to consider Venezuela more and more from the standpoint of its influence on markets of the United States, a recent decree issued by President Gomez deserves consideration. It authorizes the minister of public works to select a site on the western coast of the Peninsula of Paraguana and to construct the necessary facilities for the unloading of oil cargo from small to large tank ships. The harbor is to be on deep water and to have one or more piers, each accommodating three steamers.

This marks an important step in the providing of facilities for getting oil out of Venezuela. There is undoubtedly a limit to the employment of small tankers and in the event of production being developed of several hundred thousand barrels a day, pipe line construction would be in order. That is not an immediate possibility, but pipe lines could be constructed to this port, covering about 200 miles from the present developed fields of the east shore of Lake Maracaibo, over country offering no more topographic difficulties than have been traversed in other countries.

It is first a question of finding the oil and it is being found rapidly enough. After that, pipe lines will be found to possess an advantage over the small tanker method, which latter involve, in the long run, more expense.

Will History Repeat?

WHAT will really happen with respect to this South American oil probably is the same thing that has happened aforetime. California oil, being much cheaper than oil produced in the Mid-Continent, was brought around to the Atlantic and Gulf coasts in huge volume during and following the drilling up of gusher fields in the Los Angels Basin. It was so brought around and refined by companies which class as "strong hands," to the dislodgement from the market of Mid-Continent oil. Also, the big fellows drilled Mexico and drowned this country with oil.

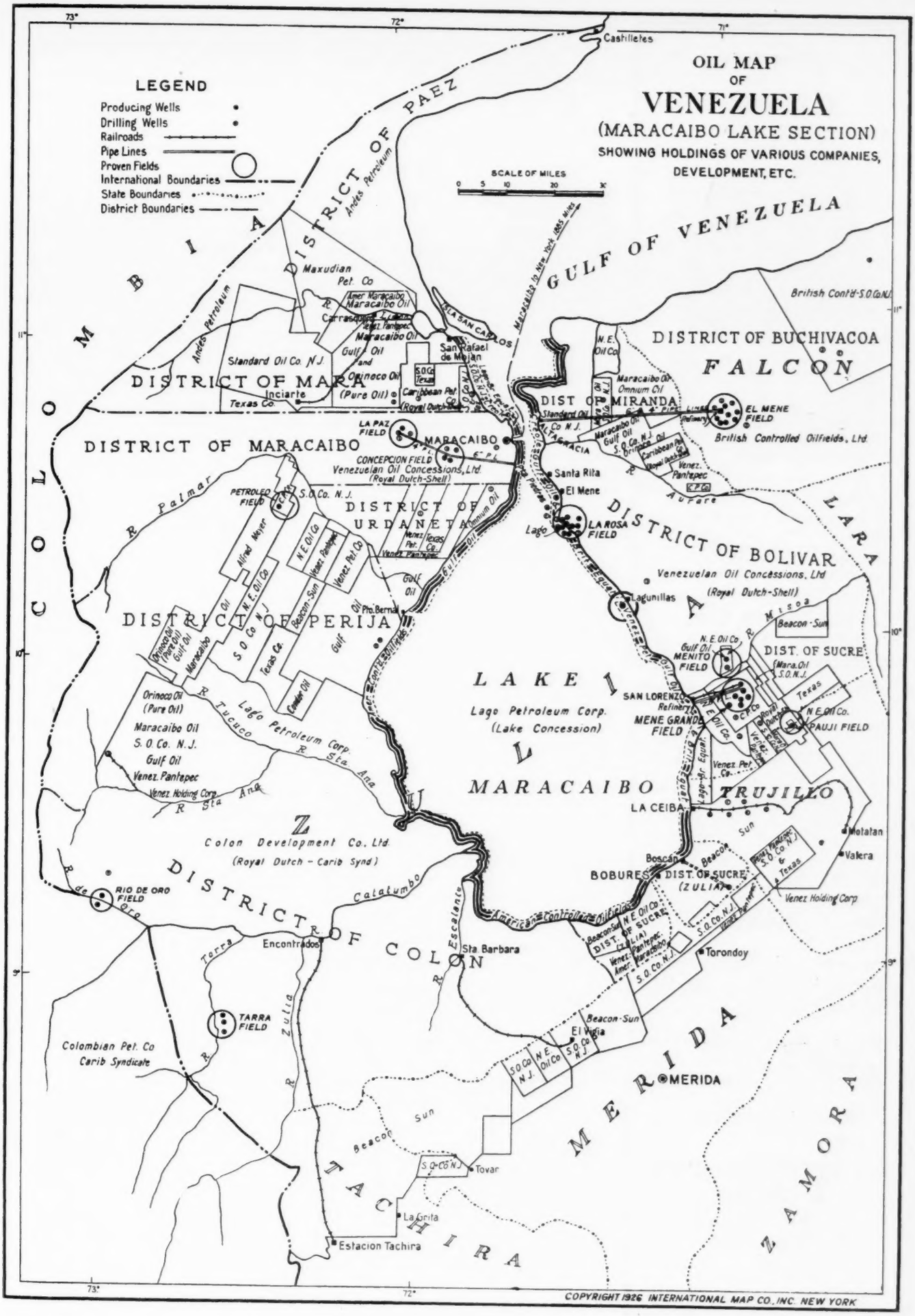
While there is no disposition on the part of companies at present shipping oil from Venezuela to rush development, it should be noted that they are making use of what they produce, are shutting in no fields that have been developed to commercial stage and are continuing to wildcat. Practically every large company that refines and markets along the Atlantic coast is active in some degree in Venezuela, either drilling or making examination of lands to determine the part to be retained and the part to be surrendered in compliance with the petroleum law.

There has been one 100,000-barrel well in Venezuela and several which made more than 10,000 barrels.

Such wells will be exploited every time. It is cheaper to bring the oil from Venezuela by tanker than it was to haul the California oil around. The point is, the American companies that are spending their money in acquiring and developing South American lands expect to get that money back and their principal way of doing it is to refine the oil and sell the products in their already developed marketing territory.

The Role of the Tropics

IS it not within reason to foresee a rather striking readjustment of the crude oil supply within the United States? That California will take care


OIL MAP
OF
VENEZUELA
(MARACAIBO LAKE SECTION)
SHOWING HOLDINGS OF VARIOUS COMPANIES,
DEVELOPMENT, ETC.
LEGEND
Producing Wells
Drilling Wells
Railroads
Pipe Lines
Proven Fields
International Boundaries
State Boundaries
District Boundaries
SCALE OF MILES
0 5 10 20 30
MACARAIBO to New York 1885 MILES
COLOMBIA
GULF OF VENEZUELA
Cabrilletes
DISTRICT OF PAEZ
Andes Petroleum
Maxudian Pet. Co
Amer. Maracaibo
Maracaibo Oil
Carrasquero
Venez. Pantepec
Gulf Oil
and
Orinoco Oil
(Pure Oil)
San Rafael de Mojan
LA SAN CARLOS
Standard Oil Co. N.J.
DISTRICT OF MARA
Inciarte
Texas Co.
S.O.C. Texas
Caribbean Pet. Co
(Royal Dutch)
British Cont'l-S.O.Co.N.J.
DISTRICT OF BUCHIVACOA
FALCON
N.E. Oil Co
Maracaibo Oil
Omnium Oil
DIST OF MIRANDA
Standard Oil Co. N.J.
EL MENE FIELD
British Controlled Oilfields, Ltd
LA PAZ FIELD
MARACAIBO
DISTRICT OF MARACAIBO
CONCEPCION FIELD
Venezuelan Oil Concessions, Ltd.
(Royal Dutch-Shell)
Santa Rita
El Mene
Lago
LA ROSA FIELD
Aupare
LARA
DISTRICT OF BOLIVAR
Venezuelan Oil Concessions, Ltd
(Royal Dutch-Shell)
R. Palmar
PETROLEO FIELD
S.O. Co. N.J.
DISTRICT OF URDANETA
Alfred Meyer
N.E. Oil Co
Venez. Pet. Co
Texas Co.
Gulf Oil
Pto. Bermudez
Lagunillas
Misoa
Beacon-Sun
DISTRICT OF PERIJA
Orinoco Oil (Pure Oil)
Gulf Oil
Maracaibo Oil
S.O. Co. N.J.
Beacon-Sun
Condor Oil
N.E. Oil Co
Gulf Oil
MENITO FIELD
DIST. OF SUCRE
(Mara.Oil S.O.N.J.)
LAKE
MARACAIBO
Lago Petroleum Corp.
(Lake Concession)
SAN LORENZO
Refinery
MENE GRANDE FIELD
N.E. Oil Co.
Texas
PAUJI FIELD
Orinoco Oil (Pure Oil)
Maracaibo Oil
S.O. Co. N.J.
Gulf Oil
Venez. Pantepec
Venez. Holding Corp.
R. Tucuco
Lago Petroleum Corp.
R. Sta. Ana
Venez. Pet. Co.
TRUJILLO
LA CEIBA
Colon Development Co. Ltd.
(Royal Dutch - Carib Synd.)
Motatan
Valera
Boscan
Beacon
BOBURES
DIST. OF SUCRE
(ZULIA)
Texas
Venez. Holding Corp.
RIO DE ORO FIELD
DISTRICT OF COLON
Catatumbo
Encontrados
Sta. Barbara
Torondoy
Beacon-Sun
El Vigia
TARRA FIELD
Colombian Pet. Co
Carib Syndicate
R. Zulia
MERIDA
MERIDA
Sun
Beacon
Tovar
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of California and Pacific Coast trade and Oriental trade tributary to it and not concern itself in the future with getting into Atlantic Coast markets is pretty well assured since the alignment, via the merger route, of large companies in California and those in eastern United States.

The present trend forces the conclusion that considerable portion of the Atlantic coastal trade will, within reasonable time, be supplied from South American fields. Interior United States will, under that condition, be the market for the oil produced in the United States, exclusive of California.

The present certainty is that the situation in this country is now being affected by South America. The 30,000 barrels a day from Colombia, whether it goes to Canadian refineries of the Imperial Oil Co., parent of the International Petroleum and hence, grandparent of the Tropical Oil Co., or is refined by the Standard Oil Co. of New Jersey, great-grandparent of the Tropical, matters not, for Canadian supply has come in large measure from the United States and wherever of these two markets the Colombian crude goes, it will displace oil produced in the United States. And, as noted, Venezuelan crude is already in the Atlantic coast markets and those of the Mississippi Valley, and already is displacing that amount of domestic oil.

Production of the Lago Petroleum Corp. goes to refinery of the Pan-American at Destrehan, La., the companies being affiliated. A recent statement by James W. Stewart, vice-president of the Lago, included an estimate of 9 to 10 million barrels for this year's production. This company has a small refinery on the shore of Lake Maracaibo, at present producing about 2,500 barrels of gasoline per month by skimming methods from about 25,000 barrels of crude oil recovery being about 10 per cent from the La Rosa-Ambrosia crude. This refinery is being increased to rated output of about 4000 barrels of gasoline per month. The products are sold in the local trade and used in the company's operations.

The estimate the writer has obtained on present Venezuelan production is 96,000 barrels. It may be less as this is printed, it may be more. The output of the La Rosa field fluctuates within a range of several thousand barrels. The figures which make up the foregoing estimate are, in barrels:

El Mene Field (S. O. of New Jersey)	6,000
Mene Grande (Caribbean Pet.)	22,000
La Rosa district (including Ambrosia) Venezuelan Oil Concessions, Ltd.	27,000
Lago Petroleum Corp.	18,000
Venezuelan Gulf	18,000
Concepcion (Venezulean Oil Concessions)	3,000
La Paz (Venezuelan Oil Concessions)	2,000
	96,000

The Newest Field

TO fields have composed the La Rosa district, Ambrosia being the newer part of the district, the discovery well of the field being about 10 kilometers north of La Rosa's center. To the La Rosa district is now added Lagunillas, the newest of the Venezulean fields.

With the Shell holdings operated in a fashion which generally follows what the other operators do, the marine zone around lake Maracaibo and the lake bed itself are critical areas with respect to new fields of the La Rosa-Ambrosia type. If the Gulf brings in a field, as it just now has at Lagunillas, it calls for drilling out in the lake bed by the Lago and inland by the Venezuelan Oil Concessions. Discovery of a new field in the bed of the lake, as was the case at Ambrosia, where Lago drilled the pathfinder well, calls for drilling in the marine zone and then on the shore. It is a situation not exactly duplicated anywhere in the country. Lago, to wildcat its holdings, which are under water, should have evidence somewhere inland of structure extending into the lake bed; the same is true of Gulf.

The Lagunillas well, which came in May 12, was drilled with diamond drill outfit to about 2500 feet, where the tar sands, horizons which are found in the La Rose field and are key horizons, were picked up. Here trouble occurred and, after trying to underream and set casing, heavy rotary outfit was moved in and the hole practically re-drilled from 1500 feet. The hole was drilled to total depth of 3493 feet, at which depth it had

Development Statistics, Venezuela's Shipping Fields

(Courtesy O'Shaughnessy's South American Oil Report)

		PRODUCING WELLS		WELLS MAY 1			
COMPANY	FIELD	Completed to May 1	Completed in April	Producing	Drilling	Preparing	Working Over
Caribbean Pet.	Mene-Grande	67	1	54	10	5	5
B. C. O., Ltd.	El Mene	84	..	69	5	..	15
V. O. C.	Concepcion	23	1	17	3	2	6
V. O. C.	La Paz	13	..	11	4	2	2
V. O. C.	La Rosa	48	6	42	5	..	6
Lago	La Rosa	38	..	27	3	..	11
Gulf-Creole	La Rosa	25	..	16	6	3	9
Gulf	La Rosa	2	..	1	..	..	..
Lago	Ambrosia	4	..	2	1	..	2
Gulf	Ambrosia	4	..	2	2	1	2
Totals		308	8	241	39	13	58

Note: Compilation does not include wildcats.

pierced several sands, or rather pay streaks in what apparently is the same zone that produces at La Rosa—at much greater depth.

A Substantial Well

THE first test on the well showed 4000 barrels per day through one 1-inch choke and at that it was flowing through 2000 feet of 4-inch line pipe. It flowed at a pressure of 175 pounds. It is a real well and marks the opening of a third prolific field—or is it one field?—on the eastern shore of Lake Maracaibo.

The oil from the Lagunillas well is somewhat heavier than is the La Rosa oil. Gravity, A.P.I., of the latter is from 21 to 26°, while the Lagunillas test made oil of about 20°. It may be that some of the oil from the tar sands has been tied in with the lower pay horizons, as the well was finished with 823 feet of open hole and 3-inch perforated liner. That might account for the heavier gravity.

The well is 23 miles south of La Rosa and 30 miles northwest of Mene Grande, but has nothing in common with the latter field.

One of the favorite indoor sports of those who are interested in Venezuelan developments is speculating on the true inwardness of the La Rosa district. Are La Rosa and Ambrosia one field, or two? There is a dry hole between, but some geologists explain away the significance of that. If they should prove to be the same field, it would be one of the greatest in the world, as already the extremities of the two are about nine miles apart.

So far, only the western slope of the La Rosa structure has been developed and, without expatiating upon the glories of this fold, its nature can be indicated by saying that wells have been drilled 1200 feet down the west slope without finding a dry hole or water with the oil. Lago has drilled in 18 feet of water and there is no telling how much greater depth they will have to drive piling for rigs farther out before the field's limit is reached. Who wants a job walking pipe line for the Lago?

Whether the Shell, inland, has found the top of the La Rosa anticline—the flexure is a northwest-southeast trending one—seems to be a matter between them and their god. The company has not gone far inland, although it opened the field, but has contented itself offsetting the Gulf, which in turn offset the Lago.

The Fever is Cured

AMBROSIA is being developed at slower rate than was La Rosa. This is principally due to recognition of characteristics of the pay sands rather than to any desire to delay development. It has been recognized that fewer wells will get just as much oil, that costs will be reduced for everyone and that drain-

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4 sizes

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Whenever you need fittings, write, wire or phone for quotations on the quantities you require.

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Have Your Engineering Department Write for Test Samples

age of one company's lease by wells of another is not the serious affair it was at first believed to be.

Lagunillas will doubtless be drilled in the orderly manner that prevails at Ambrosia. The operators understand each other; in these tropical fields expenses are high enough at best and offsetting wars and other workings at cross purposes make the burden that much greater.

Venezuela will yield for this year somewhere between 28 and 35 million barrels, according to various estimates. The higher figure is favored by several and the record thus far bears it out. Of this amount, something less than half should reach this country. In the first quarter of 1926 total oil brought from foreign countries other than Mexico, which means Peru and Venezuela, was 5,516,000 barrels, while in 1925 the first quarter imports totalled 2,203,000 barrels. It is not believed that the second quarter imports will total as much as the first, as production has been a little lower. While production and shipments do not coincide, some oils being refined and used locally, the relationship is definite.

Imports from Mexico during the first quarter of 1926 totalled 15,983,000 barrels and in the same quarter of 1925 were 22,093,000 barrels. Thus, it is seen that the decline from the Mexican source has not been made up from Venezuela. Colombia will, however, tend to bring the imports into line with what they were last year and during the latter half of 1926 the rate of importations, as well as the volume, should equal or surpass that of the latter half of 1925. And, as previously remarked, it does not matter whether the imports from Colombia are into the United States or Canada, national lines have no bearing on supply and usage in this instance.

Wildcatting in Venezuela

IF wildcatting there is much right now of interest to the operator in Venezuela, for companies which have completed reconnaisance work and have made selection of the 50 per cent of acreage in compliance with the petroleum law of the country are in position to test the part they retained. The drilling at this time is chiefly in the hands of the Standard Oil Co. of Venezuela (New Jersey); Venezuelan Gulf Oil Co.; Lago Petroleum Corp.; the Shell interests; Richmond Petroleum Co. of Venezuela (Standard of California).

On the west side of the lake, located in that narrow marine zone that is so important in Maracaibo Basin development, the Gulf is drilling an important test on the Geneva parcel of the Creole Syndicate. The test is north of the city of Maracaibo and in the district of the same name. It is between a gas showing found by the Gulf in a water well and the Palmarejo gas blowout of the Standard of Venezuela, in the district

of Mara, where drilling was carried to a depth of about 4000 feet.

In the Sibucara field, which is also in the district of Maracaibo, the Venezuelan Oil Concessions is reported to have had a good showing of light oil at around 500 feet depth.

One of the most interesting tests at this time is that being put down by the Richmond Petroleum Co., in the Urumaco area, state of Falcon, on the north coast. This is on acreage of the Venezuelan Sun Co. and the well, El Mamon No. 1, is located on a large structure. An important point in connection with this test is that it will, if successful, prove a field where a relatively short pipe line would put the oil to ocean port.

Of the development now accomplished and drilling under way, accompanying tables indicate the scope.

That the tropics are to contribute huge amounts of oil is subject for consideration now. The contribution will be made in orderly manner, but in ever increasing volume, for, as far as the geological eye has penetrated, the possibilities are enormous. The supply will be capable of definite calculation, within reasonable limits, for fairly long period ahead, but the trend is up for Venezuela, Colombia, Peru, Ecuador, at least, and these countries are so located as to have definite relationship to the industry in the United States.

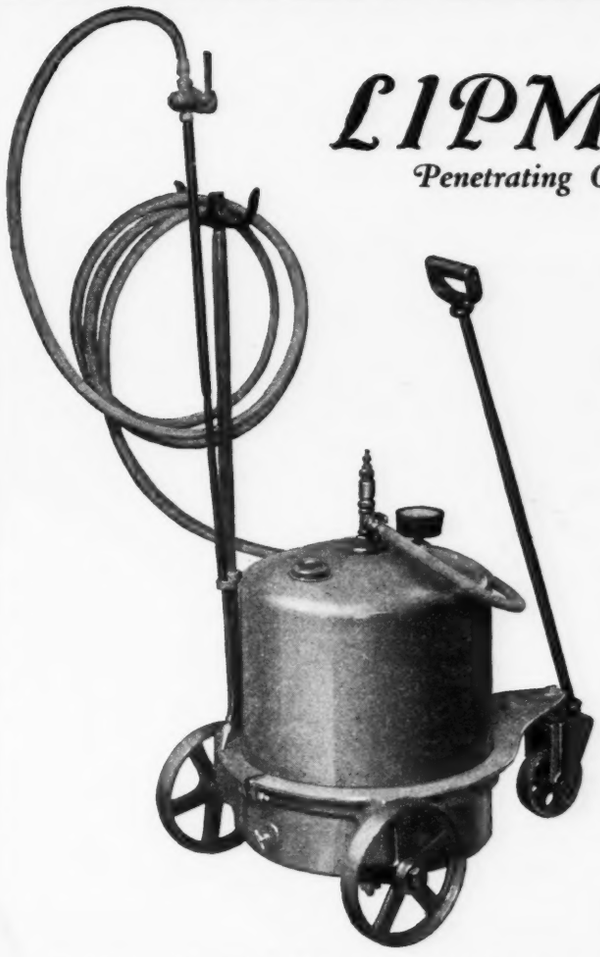
Marland Library Buys Paleontology Books

PONCA CITY, OKLA.—A collection of 1300 pieces of literature on paleontology has recently been purchased by the Marland library of the Marland Refining Co., from Dr. D. K. Gregor of Carrington, Mo. Dr. Gregor has spent the major portion of his life studying paleontology and building up his private geological library, according to Basil Turner, librarian for the Marland.

This is the second private geological collection which Oklahoma libraries have secured from Missouri during the past year. Last fall, the geologists of Tulsa purchased for the technical section of the public library of Tulsa the Prof. Shepperd collection of Springfield, Mo., which collection contained approximately 3000 volumes of valuable geological books and pamphlets, Mr. Turner states.

The Marland library now contains approximately 13,000 pieces of literature. The library is maintained for the business interests of the company.

SHREVEPORT, LA.—The new 1500 h. p. power plant at the Bossier City refinery of the Louisiana Oil Refining Corp. will be completed about July 1. It will supply light and power to the entire refinery.



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quickly pay for themselves by detecting waste or theft of oil. There are types for all uses, on gasoline, kerosene, lube oil, or fuel oil. Write us—get a catalog—find out for yourself.

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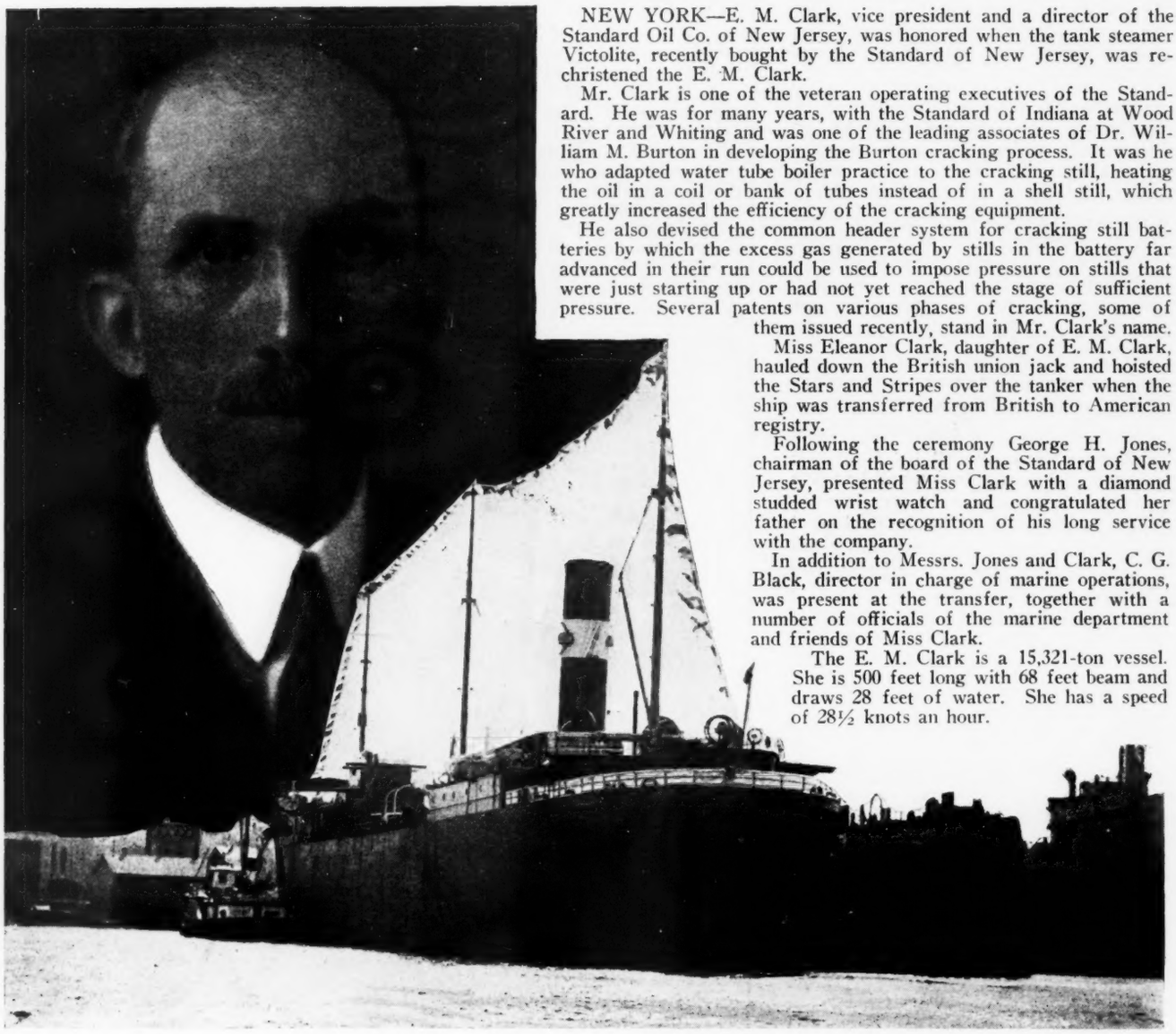
Tanker Named in Honor of E. M. Clark



NEW YORK—E. M. Clark, vice president and a director of the Standard Oil Co. of New Jersey, was honored when the tank steamer Victolite, recently bought by the Standard of New Jersey, was rechristened the E. M. Clark.

Mr. Clark is one of the veteran operating executives of the Standard. He was for many years, with the Standard of Indiana at Wood River and Whiting and was one of the leading associates of Dr. William M. Burton in developing the Burton cracking process. It was he who adapted water tube boiler practice to the cracking still, heating the oil in a coil or bank of tubes instead of in a shell still, which greatly increased the efficiency of the cracking equipment.

He also devised the common header system for cracking still batteries by which the excess gas generated by stills in the battery far advanced in their run could be used to impose pressure on stills that were just starting up or had not yet reached the stage of sufficient pressure. Several patents on various phases of cracking, some of them issued recently, stand in Mr. Clark's name.

Miss Eleanor Clark, daughter of E. M. Clark, hauled down the British union jack and hoisted the Stars and Stripes over the tanker when the ship was transferred from British to American registry.

Following the ceremony George H. Jones, chairman of the board of the Standard of New Jersey, presented Miss Clark with a diamond studded wrist watch and congratulated her father on the recognition of his long service with the company.

In addition to Messrs. Jones and Clark, C. G. Black, director in charge of marine operations, was present at the transfer, together with a number of officials of the marine department and friends of Miss Clark.

The E. M. Clark is a 15,321-ton vessel. She is 500 feet long with 68 feet beam and draws 28 feet of water. She has a speed of 28½ knots an hour.

Gulf-Texas Co. Patent Suit On Trial

Staff Special

HOUSTON, June 3.—Patent litigation between The Texas Co., and the Gulf Refining Co. reached the trial stage in federal court at Houston this week. The case, in equity, involves the aluminum chloride process patented by Almer McDuffie McAfee and purchased from him by the Gulf.

The Texas Co., in seeking to restrain the Gulf from use of the patents and in also asking recovery of damages, sets up that the patents belonged to that corporation and not to the chemist, McAfee, who had been in its employ prior to his resignation and sale of the processes to the Gulf.

The Gulf's defense is said to hinge partly on the contention that McAfee was employed only as a chemist by The Texas Co., and that his duties did not specifically call for research work.

The processes contested are covered by patents issued to both George William Gray, McAfee's immediate superior in the Texas Co., and to McAfee.

The Federal Circuit Court of Appeals, District of Columbia, vested right to the patents in McAfee, after the case had been ruled upon by the Examiners in Chief, and the Commissioner of Patents, Washington.

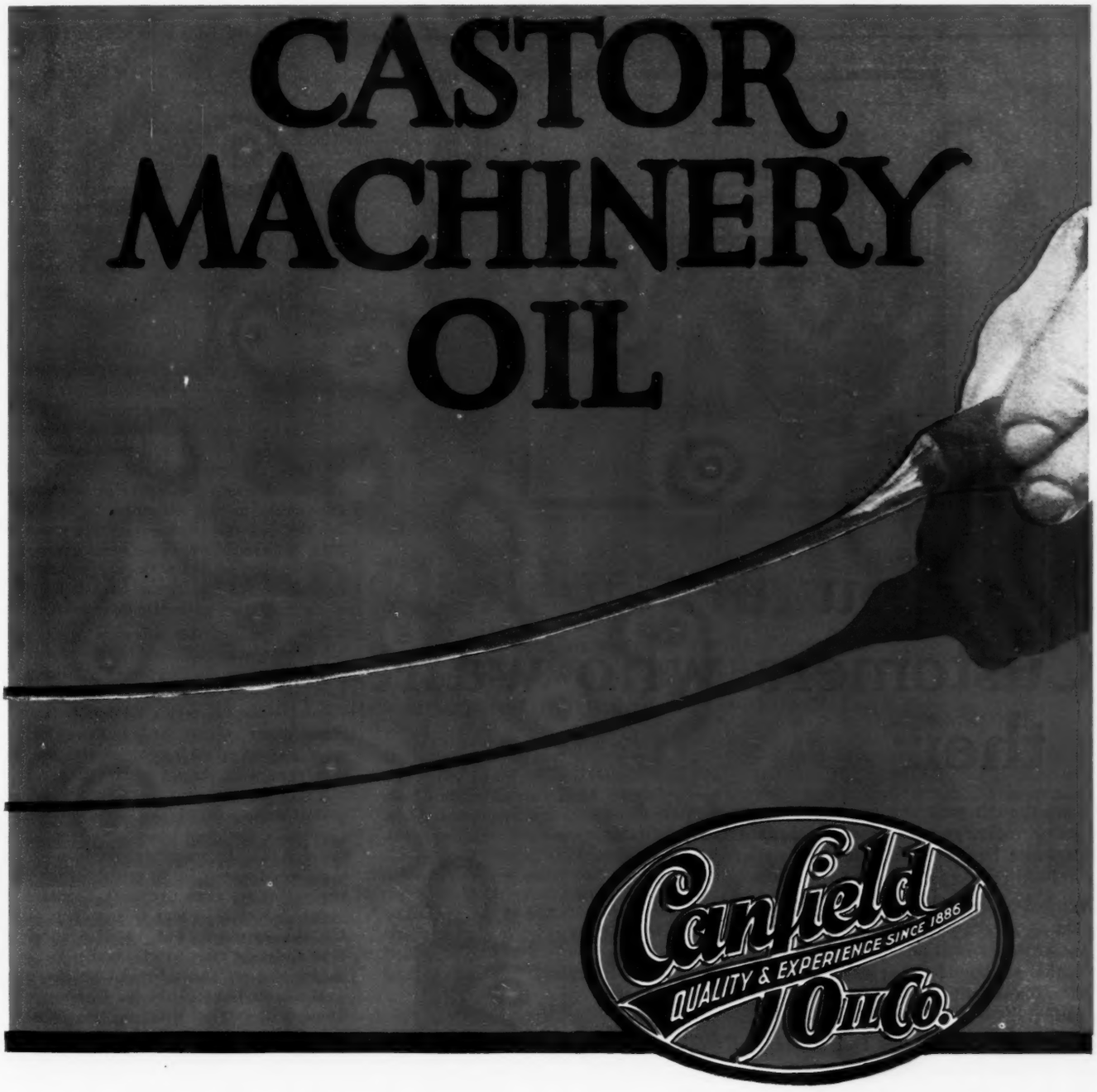
In its original petition, The Texas Co. claimed infringement of both patents, but Judge Hutcheson Feb. 20 ordered that they name one patent or the other. The hearing was set then for May 31.

London Show Set for May, 1927

LONDON, June 5.—The international oil exhibition which was planned to be held this year at the Crystal Palace in London, has been postponed to May 4, 1927. The exhibition will be limited to companies directly associated with the production, refining, transport and distribution of petroleum products, and will include British, American and European manufacturers, according to the management of the Crystal Palace.

The exhibition is under the patronage of the Institute of Petroleum Technologists, the Oil Industries Club, and others. Over 100,000 square feet of exhibit space will be available on the main floor.

The exhibition will last for 17 days.



Canfield Castors. If not familiar with them ask for samples and full particulars.

Glance over the opposite list, just check all the items that interest you, sign your name and address in the margin, and mail it back. We'll respond promptly, and with *real appreciation for the chance to serve you.*

Premium Motor Oils
(100% Pennsylvania)
Premium Tractor Oils
(100% Pennsylvania)
Canfield Filtered Motor Oils
Western Motor Oils
Western Tractor Oils
Zero Oils
Black Oils
Car Oils
Castor Machinery Oils
Belt Dressing
Soluble Oils
Cutting Oils
Viscous Neutrals
Non-Viscous Neutrals
Red Oils
Filtered Cylinder Stocks
Steam Refined Cylinder Stocks
Petrolatums
P. O. C. Gear Compound
Zero Gear Compound
High Pressure Lubricants
Cup Greases
Fibre and Sponge Grease
Gear Shield
Axle Grease
Auto Soap
Mine Car Greases
Graphite Grease
Crank Pin Grease

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Are You turning away Customers who want their Oil Changed?

Even though your station is not equipped with drain pits or racks, you can now build up a big, profitable crankcase business. You can give your customers the kind of crankcase service they want.

With *Brookins Oil Measures* you can refill any crankcase or serve from one to five quarts of oil *in one operation.* And no matter where the oil intake is located or how hard it may be to reach—the flexible metal hose puts every drop of oil right where you want it.

Brookins Oil Measures and *Brookins Portable Drain Tanks* make crankcase service easy.

With the Brookins Portable Drain Tank you can easily and quickly drain any crankcase by simply shoving the tank under the car and starting the oil flow. It makes easier work for you and less trouble for your customers.

Order Brookins Portable Drain Tanks and a set of Brookins Measures from your jobber today.

Brookins Gas Can

The Brookins Manufacturing Co.
342 Xenia Avenue. Dayton, Ohio

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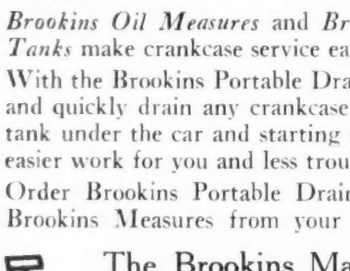
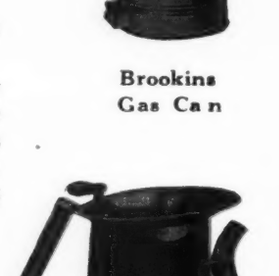


Brookins Portable Drain Tank



Brookins Oil Measure

Made in one, two, four and five quart sizes. Has a flexible metal hose that reaches any oil intake without a funnel. A handy thumb-valve controls the flow of oil.

S. O. Indiana Men Herald Stock Plan Benefits

CHICAGO, June 3.—A full page advertisement, prepared and paid for by employes of the Wood River, Ill., refinery of the Standard Oil Co. of Indiana, in appreciation of the benefits of the employes' stock purchase plan which was put into effect by the company five years ago, appeared in the May 22 edition of the St. Louis Globe-Democrat. The advertisement was addressed to Col. Robert W. Stewart, chairman of the board of directors.

It was prepared and space was bought in the newspaper by the employes themselves, without consulting company officials, according to George M. Cook, manager of public relations for the company. A desire "to tell the world about it" was the reason given by the employes for using this space to bring most effectively to the attention of the public the "liberal terms of this unusual plan, whereby we have been given the opportunity to share so generously in the profits of the great corporation we work for," the advertisement states.

The text of the advertisement was brief. It was written in the form of an open letter to the board of directors and conveyed an expression of appreciation of generous terms of the stock purchase plan. About three-quarters of the page was taken up by names of some 600 employes who shared in the plan.

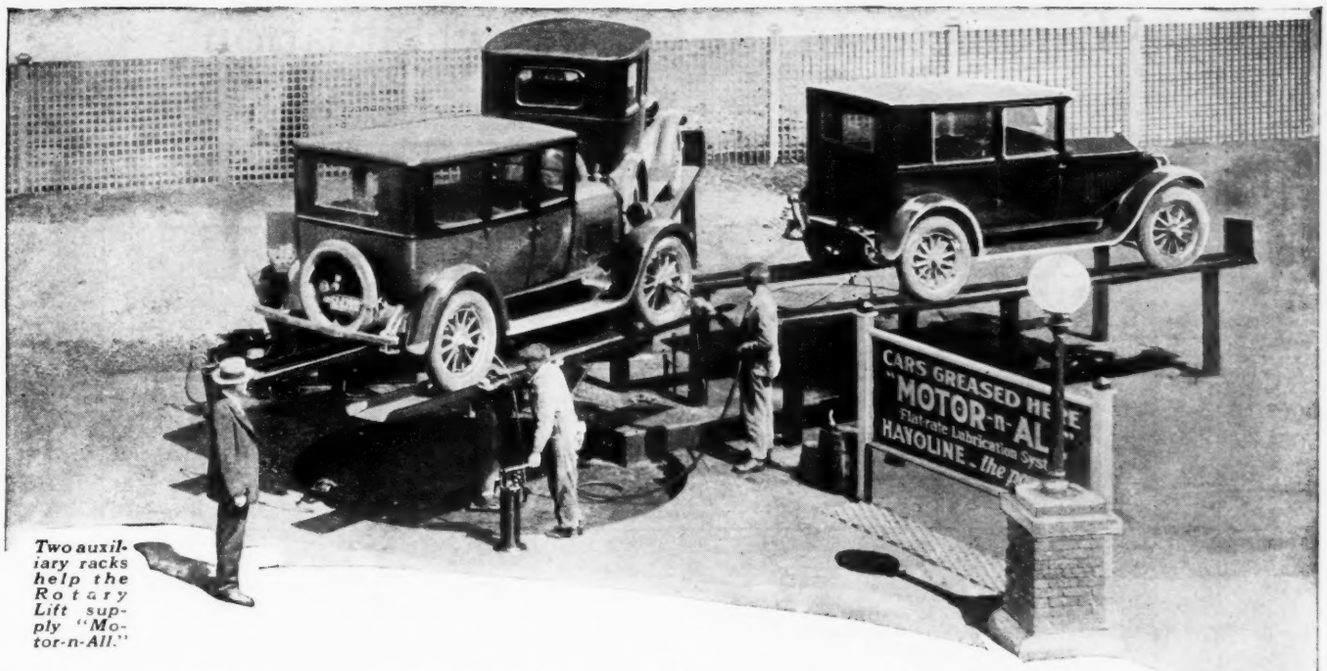
This year terminated the five-year period during which the employes' stock purchase plan has been in effect. For every dollar an employe put into stock, the company put in 50 cents, which was equivalent to a 10 per cent. increase in wages. Not only was this money saved for the employe, but he also received dividends on the stock while he was paying for it. An editorial on the plan in the same issue of the St. Louis Globe-Democrat, stated that a computation showed that for every dollar put in the pot out of his wages, each man now has $2.26.

The editorial further said: "Isn't something to be said for a plan that makes capitalists out of a body of wage workers, who probably include the usual ratio of those who are careless with their money? Company employes in St. Louis city alone are said to have a net gain of $668,000 on a total of $581,000 invested, and the total stock purchased throughout the country under the plan is placed at $25,350,000."

Increases Cracking Capacity

SHREVEPORT, June 3.—The Louisiana Oil & Refining Co. is constructing two more units of the tank and tube cracking process at its Bossier City refinery, near Shreveport. The new units will be ready for operation about June 15.

At present the company is operating five units of the same process. The additions will give it a capacity of 7,000 barrels of fresh cracking stock per day.



Two auxiliary racks help the Rotary Lift supply "Motor-n-All."

How They Did It in Evansville—

"Motor-n-All" Proves a Consistent Profit-Producer at Two Test Stations—Now Available to Distributors and Dealers Interested in Building Havoline Sales

"GIVE a customer what he wants, and he'll come back for more—not only more of the same thing, but other things, too."

On this theory two Indian Refining stations in Evansville, Indiana, have built up a momentum of business that is paying big dividends in consistent sales and consistent profits. How? By developing flat-rate lubrication service (including crank-case refill) under the name "Motor-n-All." In other words, complete oil and grease service "put up in a package" and sold in one purchase.

At one of these stations, Lincoln Ave. and Tenth Street, the first month's operation of "Motor-n-All" lubrication showed startling results! The complete service—oiling and greasing wherever needed, from front bumper to the tip of the rear springs—at a low, flat price, definitely fixed for each make of car—was news that car owners welcomed. Using either drain rack or drain pit, the Motor-n-All idea has pulled business far beyond all previous performance—this because Motor-n-All takes the emphasis off the crank case alone and puts it on the whole car.

When Indian combined Motor-n-All service with Rotary Lift convenience, the result was literally startling—a single Lift, during the first month, serviced 10 cars daily. It turned in a total "Motor-n-All" revenue of $654.19. A net profit of $228.72. All this *a complete extra*—added to the profit from normal oil and gas sales.

Brings in Repeat Sales

Yet the results were even more far-reaching than that. Car owners jumped at the chance offered by "Motor-n-All" service. The 10-car-a-day average from the start testifies to that fact! And a service which customers find of value naturally adds prestige to the station which gives it. Cars come swinging in for gasoline and oil sales that might otherwise have stopped down the block, or across the street. So—to that net profit of $228.72 can be added the profit from extra gas and oil sales month after month which "Motor-n-All" hooked in.

Novel Feature Tried

At a second station, illustrated above, "Motor-n-All" service on the Rotary Lift brought a waiting line for lubrication service. One Lift was unable to handle all the business. More often than not passers-by would see one car on the Lift, another on the drain pit and a third one waiting. But it's hard to keep the third car from driving off. So—a new development!

Alongside the Rotary Lift have been placed two auxiliary racks. They are so arranged that a car can be driven on the Lift, raised to full working height and then pushed on either auxiliary rack for servicing. Applying the principle of the railroad roundhouse turntable to car lubrication! With this arrangement three cars can be given "Motor-n-All" service at the same time.

What is "Motor-n-All?" It is complete, A to Z lubrication. Crankcase, transmission, differential, wheels, springs, Alemite fittings—everything on a car that needs protection from friction. Automobile drivers like the idea. They can get a complete job done more cheaply than by ordering crank-case service one day, Alemite service another, etc. And they know nothing will be overlooked. Service stations like it, too! It means a more consistent volume of business. It means—in spite of the low, attractive flat rates offered—a profit averaging about a dollar per car. Better than fighting for the narrow profits on gasoline!

Who can offer "Motor-n-All?" Everyone who sells Havoline. Distributors marketing Havoline under a franchise granting exclusive, long-term sales rights find in "Motor-n-All" an excellent merchandising plan both for use in their own stations and in marketing to independent dealers. Full co-operation from the Indian Refining Company assured. This includes making out a schedule of price lists, supplying booklets, mailing cards, local advertising campaigns, and service station signs.

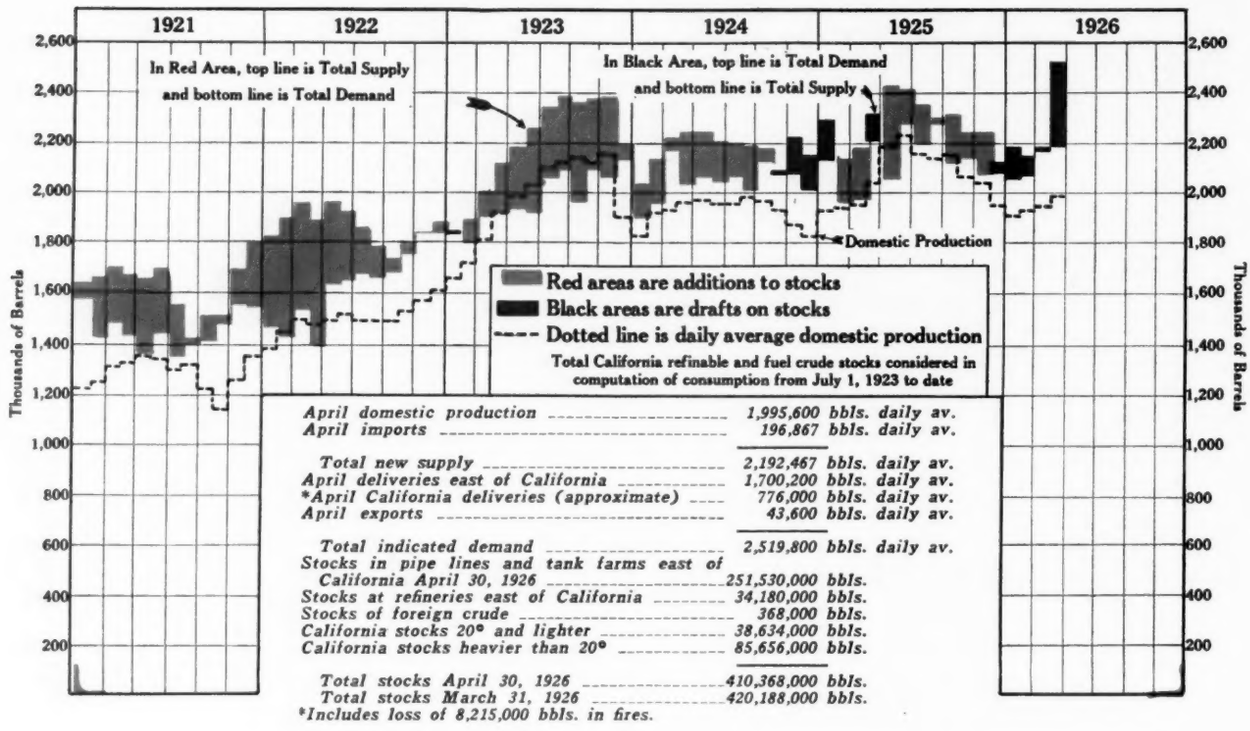
A Profit Combination

To make the most of Havoline—the power oil—offer it in connection with "Motor-n-All," the complete Havoline lubrication system! Write or wire for details of how you can build up this extra-profit business. Address A. H. White, Indian Refining Company, Lawrenceville, Ill.

HAVOLINE
- the power oil
INDIAN REFINING COMPANY, Incorporated

Barometer of the Crude Oil Situation

(Figures dotted on chart are daily average over each month.)



April domestic production	*1,995,600 bbls. daily av.*
April imports	*196,867 bbls. daily av.*
Total new supply	*2,192,467 bbls. daily av.*
April deliveries east of California	*1,700,200 bbls. daily av.*
**April California deliveries (approximate)*	*776,000 bbls. daily av.*
April exports	*43,600 bbls. daily av.*
Total indicated demand	*2,519,800 bbls. daily av.*
Stocks in pipe lines and tank farms east of California April 30, 1926	*251,530,000 bbls.*
Stocks at refineries east of California	*34,180,000 bbls.*
Stocks of foreign crude	*368,000 bbls.*
California stocks 20° and lighter	*38,634,000 bbls.*
California stocks heavier than 20°	*85,656,000 bbls.*
Total stocks April 30, 1926	*410,368,000 bbls.*
Total stocks March 31, 1926	*420,188,000 bbls.*

**Includes loss of 8,215,000 bbls. in fires.*

Crude Stocks Continue to Fall in April; Gasoline Reserves Turn Downward

Staff Special

CLEVELAND, June 4.

INCREASED drilling in April brought about an increase of 1.9 per cent in daily average production of crude oil in April, the report of G. R. Hopkins, petroleum economist of the Bureau of Mines, reveals, but stocks of crude oil east of California declined again. April was the eleventh consecutive month in which crude oil stocks east of California were drawn on to meet demands of refiners.

Gasoline stocks turned downward although production of gasoline established a new high record, totaling 987,633,000 gallons, a daily average of 32,921,000 gallons. The April gasoline output was 5.26 per cent larger than March daily average production and 13.21 per cent larger than production in April, 1925. Domestic demand was only 4.11 per cent larger in April, 1926, than in April, 1925.

Total Motor Fuel Production

TOTAL motor fuel production—that is, all motor fuels including natural gasoline blends not made at refineries, and benzol blends—amounted to 1,027,300,000 gallons, a daily average of 34,240,000 gallons, compared with 1,007,900,000 gallons in March, a daily average of 32,500,000 gallons. Comparative table of the total motor fuel output follows:

(Thousands of Gallons)

	March	April
Gasoline produced at refineries	969,500,000	987,600,000
Natural gasoline produced at plants	113,100,000	109,600,000
Benzol production*	7,500,000	7,200,000
Less natural gasoline blended at refineries	71,200,000	66,200,000
Less natural gasoline run through refinery pipe lines	11,000,000	10,900,000
TOTAL U. S.	1,007,900,000	1,027,300,000
Daily average	32,500,000	34,240,000

**Estimated with production of by-product as basis.*

Daily average crude production in April was 1,995,600 barrels, compared with 1,957,064 barrels in March. The big increases came in the Mid-Continent pools. Arkansas, Kansas, Oklahoma, north and central Texas, and north Louisiana all made large gains. California production slumped more than 4,000 barrels on the daily average to 603,059 barrels.

Total crude production for the first four months of 1926 is slightly under the total for the corresponding time of 1925, due to lower production in the Mid-Continent. A year ago Smackover brought Mid-Continent production to a peak in the spring and the total production of Mid-Continent states for the three winter and first full months of spring was more than 4,000,000 barrels larger than production this year.

With the exception of the Appalachian field daily average deliveries were larger in April than in March. In Table No. 1 a large increase is shown in crude consumed in California but this figure is inflated by the inclusion of losses in the fires which destroyed 8,215,000 barrels of oil.

Deliveries Exceed Quarter Billion

IN the four months ended April 30, 1926, deliveries of crude slightly exceeded a quarter billion barrels, a gain of 18,000,000 barrels over deliveries in the corresponding time last year.

Imports of crude were lower in April than in March, falling from 232,774 to 196,867 barrels. Receipts of crude from Mexico decreased from 169,419 to 146,867 barrels and from other countries, mostly Venezuela, from 63,355 to 50,000

Table No. 1—Production, Imports, Exports and Deliveries of Crude

(Barrels

Fields	Apr. Daily Average Production	*Mar. Daily Average Production	Jan.-Apr. Production 1926	Jan.-Apr. Production 1925	‡Apr. Daily Average Deliveries	*‡Mar. Daily Average Deliveries	‡Jan.-Apr. 1926 Total Deliveries	‡Jan.-Apr. 1925 Total Deliveries
Appalachian	79,300	77,129	9,056,000	8,914,000	72,100	80,032	8,877,000	9,058,000
Lima-Indiana	5,700	5,774	665,000	704,000	5,466	6,516	747,000	771,000
Illinois-S. W. Indiana	21,100	25,129	2,756,000	2,794,000	11,000	10,065	1,567,000	2,682,000
Mid-Continent	1,091,808	1,047,104	125,973,000	130,667,000	1,222,000	1,109,065	138,598,000	135,916,000
Gulf Coast	88,833	85,903	10,654,000	9,231,000	122,000	93,806	13,651,000	9,755,000
Rocky Mountain	105,800	108,742	12,515,000	10,919,000	97,167	94,258	11,373,000	10,649,000
California	603,059	607,283	73,152,000	72,199,000	776,000	606,000	75,791,000	63,632,000
Total Domestic	1,995,600	1,957,064	234,771,000	235,428,000	2,305,733	1,999,742	250,604,000	232,463,000
Imports	196,867	232,774	21,499,000	24,395,000	.....	.....	.....	.....
Deliveries of Foreign Crude	.....	.....	.....	.....	198,400	236,548	21,537,000	24,354,000
Exports	.....	.....	.....	.....	43,600	31,161	4,506,000	4,126,000
Total new supply	2,192,467	2,189,838	256,270,000	259,823,000	.....	.....	.....	.....

‡Includes exports. *Revised.

barrels. April exports were larger than those in March by 12,500 barrels total.

Tank farm and pipe line stocks of crude oil east of California decreased 4,000,000 barrels to 267,877,000 barrels in April, but refiners' stocks increased 2,500,000 barrels to 34,180,000 barrels. Total stocks of crude, including foreign oil, east of California decreased more than 1,600,000 barrels in April. Both heavy and light grades of California oil fell off but the decrease was due wholly to the serious fires early in the month. A comparison of crude oil stocks at the end of each of the last 16 months reported follows:

(Thousands of Barrels)

1925	East of Calif.	*In Calif.	Total
January	310,199	98,914	409,113
February	309,462	100,483	409,945
March	308,548	102,270	410,818
April	308,382	105,049	413,431
May	312,085	108,129	420,214
June	310,732	110,203	420,935
July	308,429	113,428	421,857
August	303,004	116,959	419,963
September	300,981	121,664	422,645
October	297,963	124,369	422,332
November	296,690	126,253	422,521
December	294,331	129,306	423,637
1926			
January	291,400	130,841	422,241
February	287,975	131,638	419,613
March	287,710	131,678	419,388
April	286,078	‡124,290	410,368

*Includes heavy fuels. ‡Includes 800,000 barrels of pipe line working stock.

Exports' New High Record

GASOLINE production in April was 5.4 per cent larger than March output and domestic shipments were 10.24 per cent larger. Exports were at a new high record, totaling 184,891,000 gallons, a daily average of 6,163,033 gallons. The combined domestic and export shipments from refineries in April were 15.53 per cent larger than March combined shipments.

Runs to stills were increased from 2,176,500 barrels in March to 2,225,200 barrels in April and the volume of gasoline produced by straight run methods was one per cent larger, being 64 per cent of all gasoline manufactured, compared with 63 per cent straight run in March. Runs of crude were decreased at plants on both the Atlantic and Pacific coasts but were increased in all other refining regions.

Output of gasoline, as shown in Table No. 9, was slightly lower in the East Coast and Appalachian regions but

Table No. 2—Daily Average Production by States

(Amounts in Barrels)

States	April	March*
Arkansas	180,167	169,097
California	603,059	607,283
Colorado	6,167	6,226
Illinois	19,300	23,548
Indiana, southwest	1,800	1,581
Northeast	333	355
Kansas	112,533	104,839
Kentucky	17,217	17,119
Louisiana, Gulf Coast	11,167	11,226
Rest of State	52,133	48,742
Montana	24,033	24,580
New Mexico	3,883	4,097
New York	5,500	5,997
Ohio, central-eastern	14,966	15,290
Northwestern	5,367	5,419
Oklahoma, Osage	65,600	66,709
Rest of State	417,475	393,007
Pennsylvania	24,933	23,419
Tennessee	150	107
Texas, Gulf coast	77,666	74,677
Rest of State	263,900	259,710
West Virginia	16,534	16,097
Wyoming, Salt Creek	52,067	53,323
Rest of State	19,700	20,516
Total U. S.	1,995,600	1,957,064

Classification by Gravity

24° A.P.I. grav. and lighter	1,445,833	1,419,871
Heavier than 24°	549,767	537,193

*Revised.

larger than in March in all other regions. Shipments were larger than in March in all districts although the Louisiana-Arkansas district had an increase of less than 1 per cent.

Stocks of gasoline increased in the Indiana - Illinois, Louisiana - Arkansas, and Rocky mountain districts but other regions reported drafts on stocks, running from 0.47 per cent in California to 6.27 per cent in the Appalachian region. For the whole United States drafts on gasoline stocks amounted to 0.49 per cent.

64 Days' Supply

THE new supply of gasoline averaged 33,556,333 gallons daily and indicated consumption 33,876,700 gallons daily. At the April rate of demand, stocks of gasoline on April 30 represented 64 days' supply, compared with 73 days' supply at the end of March, and 61 days' supply on April 30, 1925.

Natural Gasoline Output Steady

PRODUCTION of natural gasoline amounted to 109,617,000 gallons, a daily average of 3,654,000 gallons com-

Table No. 3—Stocks of Crude Oil

(Domestic unless otherwise specified, amounts in thousands of barrels)

Districts	Apr.30 1926	Mar.31 1926	Apr.30 1925
At Refineries			
East Coast:			
Domestic	6,456	6,602	8,504
Foreign	3,229	3,046	1,900
Appalachian	1,624	1,616	1,210
Indiana, Illinois, etc.	1,727	1,571	1,574
Oklahoma, Kansas	4,072	3,558	4,868
Texas Gulf Coast:			
Domestic	6,642	5,975	4,438
Foreign	369	266	556
Texas, rest of state	1,025	740	1,282
Louisiana Gulf Coast:			
Domestic	5,102	4,217	4,660
Foreign	1,732	1,871	1,797
Louisiana-Arkansas	631	690	403
Rocky Mountain	1,571	1,498	1,262
U. S. East of Calif.	34,180	31,650	32,262
At Tank Farms, in Pipe Lines and Elsewhere than Refineries			
Appalachian	6,893	6,653	6,996
Kentucky	1,778	1,802	2,146
Lima-Indiana	889	882	1,154
Illinois-S.W.Indiana	11,771	11,468	10,982
Okla.-Kans.-Texas except the Gulf Coast	141,341	144,638	171,565
N. Louisiana-Ark.	42,470	43,079	33,744
Gulf Coast	16,266	17,261	19,676
Rocky Mountain	30,122	29,863	28,942
Foreign, Atlantic ports	56	102	231
Gulf ports	312	312	492
Total east of Calif.	286,078	287,710	308,382
California:			
20° and lighter	38,634	43,996	44,040
Heavier than 20°	85,656	88,482	62,565
GRAND TOTAL	410,368	420,188	414,987
CLASSIFICATION BY GRAVITY			
Crude Elsewhere than at Refineries East of California			
24° and lighter	229,088	227,928	.....
Heavier than 24°:			
Domestic	56,622	59,368	.....
Foreign	368	414	723

*Revised.

Table No. 4—Gasoline Situation in Recent Months

(Gallons)

	Production	Imports	Exports	Domestic Consumption	Stocks
July 1925	966,908,000	16,845,000	105,107,000	963,072,000	1,610,790,000
August	972,689,000	13,180,000	124,042,000	931,901,000	1,540,716,000
September	906,109,000	7,633,000	91,441,000	848,867,000	1,514,150,000
October	944,433,000	9,009,000	106,570,000	831,774,000	1,529,248,000
November	922,058,000	15,684,000	118,999,000	758,111,000	1,589,880,000
December	934,549,000	13,448,000	129,850,000	755,822,000	1,648,328,000
1925 Total	10,849,127,000	160,137,000	1,330,314,000	9,325,094,000	.....
January 1926	948,904,000	16,118,000	143,969,000	720,358,000	1,749,023,000
February	863,525,000	17,133,000	120,304,000	650,718,000	1,858,659,000
March	969,543,000	21,701,000	133,966,000	779,571,000	1,936,336,000
April	987,633,000	19,057,000	187,891,000	831,410,000	1,926,725,000
April, 1925	871,597,000	10,241,000	109,194,000	798,584,000	1,717,592,000

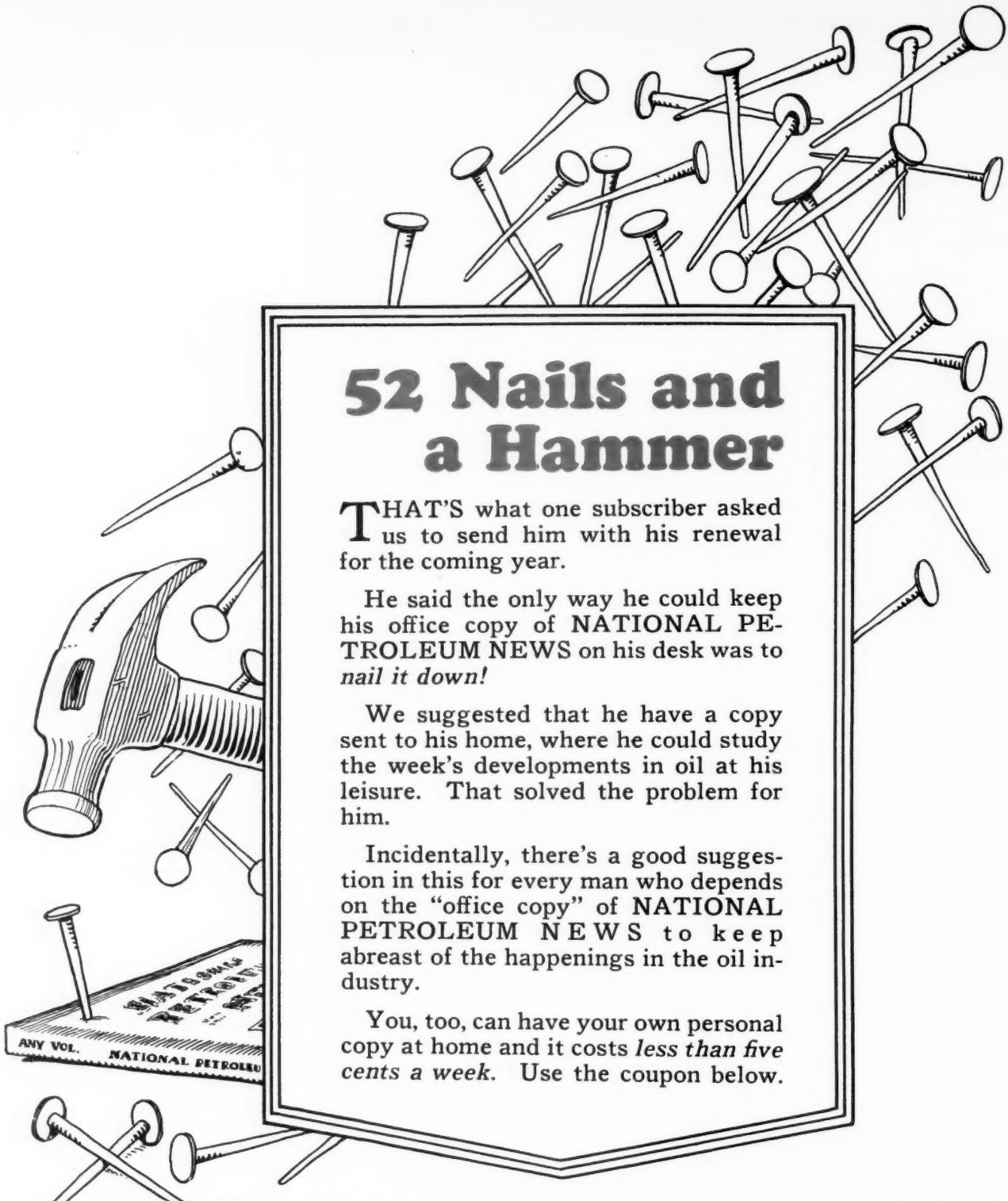


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Table No. 5—Gasoline Production by Various Methods in April

(Gallons)

	Straight run	%	Cracked	%	Natural gasoline	%	Total
East Coast	77,103,000	52	55,216,000	37	16,044,000	11	148,363,000
Appalachian	26,567,000	70	10,875,000	28	882,000	2	38,324,000
Indiana, Ill., etc	77,195,000	58	51,519,000	39	3,192,000	3	131,906,000
Oklahoma, Kans., etc	110,443,000	66	46,235,000	28	9,492,000	6	166,170,000
Texas	119,912,000	56	78,740,000	37	14,322,000	7	212,974,000
Louisiana and Ark	38,457,000	62	20,621,000	33	2,730,000	5	61,808,000
Rocky Mountain	28,090,000	50	24,690,000	44	3,318,000	6	56,098,000
California	155,820,000	91	.....	..	16,170,000	9	171,990,000
U. S. Total	633,587,000	64	287,896,000	29	66,150,000	7	987,633,000
U. S. Total Mar. 1926	614,670,000	63	283,683,000	30	71,190,000	7	969,543,000
Texas and Louisiana Gulf Coasts*	117,199,000	54	85,982,000	40	13,062,000	6	216,243,000

*Included above under Texas, Louisiana and Arkansas.

Table No. 6—March Natural Gasoline Output, Demand and Stocks

(Gallons)

Regions	Natural Gasoline: Production (net)*	Natural Gasoline: Stocks end of month	Blended Motor Fuel: Natural gasoline used in blends	Blended Motor Fuel: Naphtha or other oils used in blends	Blended Motor Fuel: Stocks end of month
Appalachian	8,694,000	3,438,000	259,000	327,000	348,000
Indiana, Illinois, etc	1,588,000	318,000	61,000	13,000	25,000
Oklahoma, Kansas, etc	42,224,000	11,208,000	2,720,000	4,921,000	2,277,000
Texas	18,260,000	4,142,000	217,000	783,000	469,000
Louisiana and Arkansas	6,006,000	903,000	.....	.....	6,000
Rocky Mountain	3,569,000	354,000	95,000	188,000	185,000
Total east of Calif	80,341,000	20,363,000	3,352,000	6,232,000	3,310,000
California	29,276,000	914,000	Not available		
TOTAL U. S	109,617,000	21,277,000	3,352,000	6,232,000	3,310,000
Daily average	3,654,000	.....	.....	.....	.....

*1 per cent estimated.

Table No. 7—Supply, Demand, and Stocks of Heavier Products

(Gallons)

	Production	Imports	Exports*	Domestic demand	Stocks end of period
KEROSENE (Gals.)					
February	197,992,000	34,000	66,253,000	131,397,000	287,994,000
March	230,378,000	50,000	74,950,000	149,565,000	293,907,000
April	210,488,000	22,000	68,973,000	140,841,000	294,603,000
April, 1925	200,497,000	72,000	80,481,000	141,701,000	433,260,000
LUBRICANTS (Gals.)					
February	101,893,000	56,000	33,128,000	53,484,000	332,176,000
March	110,182,000	165,000	31,075,000	90,565,000	320,883,000
April	112,131,000	131,000	38,355,000	85,314,000	309,476,000
April, 1925	107,467,000	270,000	38,457,000	78,966,000	290,058,000
WAX (Lbs.)					
February	49,922,000	668,000	28,709,000	20,690,000	123,964,000
March	55,329,000	456,000	25,005,000	24,403,000	130,341,000
April	54,985,000	647,000	31,560,000	18,329,000	136,084,000
April, 1925	48,868,000	448,000	24,627,000	16,456,000	103,310,000
GAS AND FUEL OILS (Gals.)					
February	1,136,823,000	66,573,000	133,997,000	.....	‡900,670,000
March	1,244,967,000	39,786,000	98,312,000	.....	‡851,234,000
April	1,210,724,000	48,197,000	145,963,000	.....	‡830,481,000
April, 1925	1,237,012,000	47,189,000	120,238,000	.....	‡860,706,000

*Exports, except for wax, include shipments to Alaska, Hawaii and Porto Rico.
‡These stocks for east of California only.

Table No. 8—Runs to Stills of All Oils during March

(Barrels)

	Crude Oil: Domestic	Crude Oil: Foreign	Unfinished Oils	Natural Gasoline	Total Oils run to Stills	Daily Av. Runs in April	Daily Av. Runs in March
East Coast	7,582,000	2,089,000	909,000	382,000	10,962,000	365,400	369,032
Appalachian	2,187,000	.....	109,000	21,000	2,317,000	77,133	74,677
Ind., Ill., etc	5,613,000	.....	402,000	76,000	6,091,000	203,033	187,419
Okla., Kans., etc	7,494,000	.....	260,000	226,000	7,980,000	266,000	250,742
Texas	11,998,000	460,000	751,000	341,000	13,550,000	451,667	422,774
Louisiana and Ark	4,870,000	1,041,000	200,000	65,000	6,176,000	205,867	203,839
Rocky Mountain	2,304,000	.....	579,000	79,000	2,962,000	98,733	98,355
California	15,651,000	.....	701,000*	385,000	16,737,000	557,900	563,228
U. S. TOTAL	57,699,000	3,590,000	3,911,000	1,575,000	66,775,000	2,225,200	2,176,500
Daily Av. Apr., 1926	1,923,000	119,700	130,000	52,500	2,225,200	.....	.....
Daily av. Mar., 1926	1,891,000	124,800	106,000	54,700	2,176,500	.....	.....
Texas Gulf Coast	9,212,000	460,000	687,000	310,000	10,669,000	355,633	329,645
La. Gulf Coast	3,244,000	1,041,000	163,000	1,000	4,449,000	148,300	150,064

*In crudes 203,000 bbls. of net tops rerun.

pared with daily average of 3,650,000 gallons in March. A large gain was made by the Oklahoma-Kansas region but in the Appalachian and several other regions output was off. Stocks of natural gasoline on April 30 amounted to 3,352,000 gallons, a decrease of 250,000 gallons.

The bullishness of kerosene last month appears to have been contrary to the statistical position of the product. Stocks increased only 700,000 gallons but production was 20,000,000 gallons less than in March. Both foreign and domestic shipments slumped a total of 15,000,000 gallons.

Draft on Lube Stocks

A DRAFT of 11,000,000 gallons was made on lubricating oils stocks. Output for the month was increased 2,000,000 gallons. Exports increased more than 7,000,000 gallons and domestic demand fell more than 5,000,000 gallons. An increase in wax exports was offset by a decrease in domestic demand and stocks increased almost 6,000,000 pounds. There was little change in volume of production.

There was a small increase in gas and fuel oil output. Exports increased almost 50 per cent to 145,963,000 gallons and imports increased 9,000,000 gallons to 48,197,000 gallons. Stocks of fuel oil east of California declined 21,000,000 gallons.

The refinery data of the bureau were compiled from 326 plants with a rated charging capacity of 2,590,000 barrels daily, compared with 323 plants in March which are operating at 78 per cent of their rated capacity of 2,577,000 barrels daily.

B. of M. Statement

THE statement of the Bureau of Mines as compiled by G. R. Hopkins, petroleum economist, is as follows:

CRUDE PETROLEUM: The production of crude petroleum in the United States during April, 1926, as compiled from pipe-line reports to the Bureau of Mines, Department of Commerce, amounted to 59,868,000 barrels, a daily average of 1,995,600 barrels. This is an increase in daily average production over March, 1926, of 2 per cent. The prospect of a price increase on the basis of continued withdrawals from stock was the stimulating influence which caused production to practically attain the 2,000,000 barrel per day mark. This increase in activity is illustrated by the increase in the number of wells com-

Table No. 9—Daily Average Gasoline Output, Shipments, and Stocks with Changes from March

Districts	April Output	March Output	Per Cent of Change, April from Mar.	April Ship.	March Ship.	Per Cent of Change, April from March	Stocks April 30	Stocks March 31	Per Cent of Change, April from March	Stocks April 30, 1925
East Coast	4,945,433	4,970,322	—0.5	5,697,567	4,531,064	+25.74	401,542,000	424,106,000	—5.32	349,661,000
Appalachian	1,277,467	1,281,193	—0.29	1,376,533	1,168,451	+17.81	44,411,000	47,383,000	—6.27	45,163,000
Ind., Ill., etc	4,396,867	4,016,451	+9.47	3,969,867	3,399,516	+16.74	271,600,000	258,790,000	+4.56	219,067,000
Oklahoma-Kans	5,539,000	5,126,451	+8.04	5,618,200	5,100,935	+10.14	165,192,000	167,568,000	—1.42	184,244,000
Texas	7,099,133	6,519,871	+8.88	7,329,333	6,422,516	+14.12	228,239,000	235,143,000	—2.93	193,769,000
Louisiana-Ark	2,060,267	1,988,903	+4.58	1,747,567	1,751,742	— 0.23	168,948,000	159,567,000	+5.87	98,317,000
Rocky Mountain	1,869,933	1,788,000	+3.58	1,698,167	1,395,258	+21.71	203,063,000	197,910,000	+2.60	146,738,000
California	5,733,000	5,584,258	+2.67	5,804,300	5,003,612	+15.00	443,730,000	445,869,000	—0.47	324,042,000
TOTAL U.S	32,921,100	31,275,580	+5.26	33,241,534	28,773,094	+15.53	1,926,725,000	1,936,336,000	—0.49	1,561,002,000

Stop

Hot Weather Evaporation Losses

By Loading With Universal Gastite Dome Covers

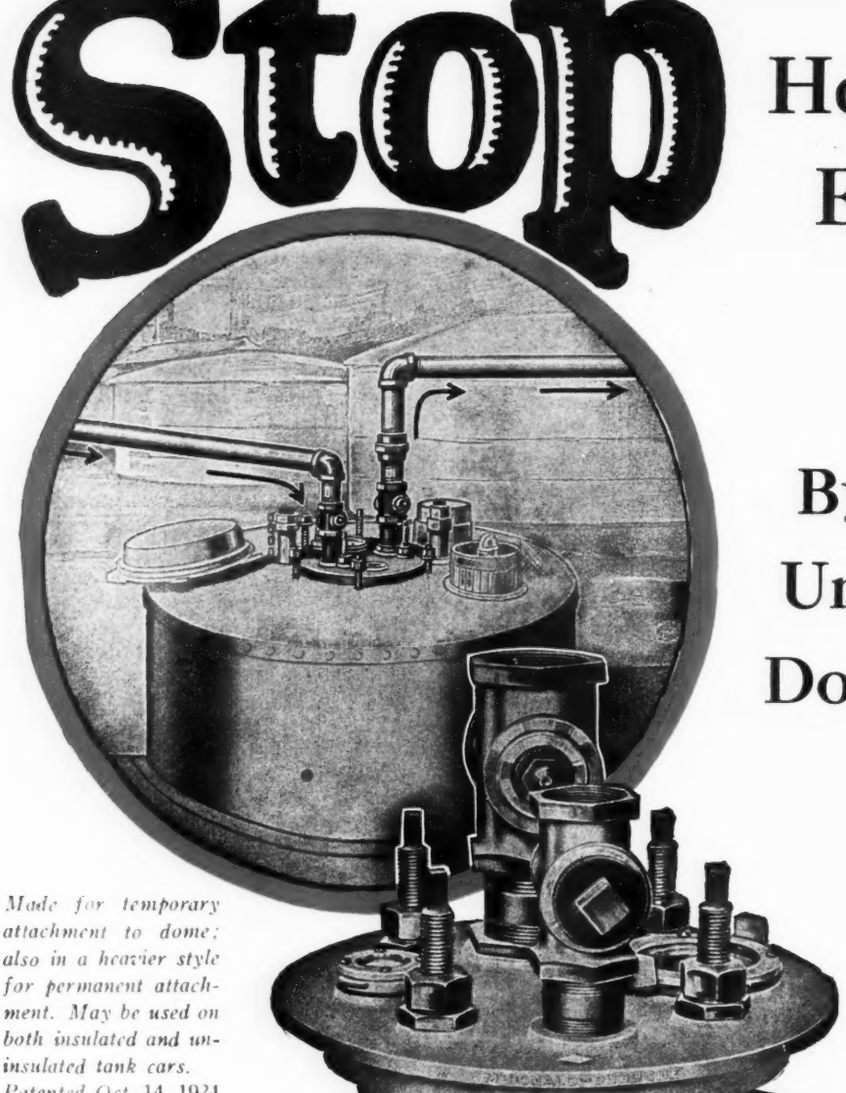

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Table No. 10—Output and Losses at Refineries during April, 1926

District	Gasoline (Gals.)	Kerosene (Gals.)	Gas and Fuel Oils (Gals.)	Lubricants (Gals.)	Wax (Lbs.)	Coke (Tons)	Asphalt (Tons)	Other finished products (Gals.)	Unfinished products (Gals.)	Losses (Bbls.)
East Coast	148,363,000	44,080,000	184,967,000	33,132,000	22,284,000	13,460	88,175	4,587,000	945,000	421,000
Appalachian	38,324,000	13,688,000	20,816,000	15,802,000	7,957,000	1,825	.....	678,000	1,238,000	121,000
Ind., Ill., etc	131,906,000	14,314,000	73,043,000	11,062,000	6,580,000	21,761	16,632	4,214,000	2,307,000	212,000
Okla., Kans., etc	166,170,000	30,011,000	103,702,000	9,427,000	4,453,000	8,536	677	1,292,000	7,472,000	335,000
Texas	212,974,000	52,049,000	225,556,000	28,106,000	4,616,000	11,271	14,370	171,000	22,782,000	509,000
Louisiana and Ark	61,808,000	27,360,000	112,210,000	2,993,000	6,066,000	11,350	34,470	7,224,000	30,723,000	131,000
Rocky Mountain	56,098,000	7,356,000	29,270,000	2,495,000	3,029,000	7,828	2,197	36,000	24,957,000	26,000
California	171,990,000	21,630,000	461,160,000	9,114,000	.....	.....	42,077	5,838,000	*13,818,000	227,000
U. S. TOTAL	987,633,000	210,488,000	1,210,724,000	112,131,000	54,985,000	76,031	198,598	24,040,000	104,242,000	1,982,000
Daily av. April, 1926	32,921,000	7,016,000	40,357,000	3,738,000	1,833,000	2,534	6,620	801,000	3,475,000	66,100
Daily av. March, 1926	31,276,000	7,432,000	40,160,000	3,554,000	1,785,000	2,603	6,793	810,000	2,975,000	66,400
Texas Gulf Coast	169,409,000	43,807,000	173,350,000	27,380,000	4,046,000	9,619	14,370	46,000	11,106,000	412,000
La. Gulf Coast	46,834,000	25,417,000	63,428,000	2,937,000	6,066,000	10,718	32,958	6,767,000	27,406,000	71,000

*Includes 203,000 barrels net tops re-run.

Table No. 11—Stocks Held by Refining Companies on April 30, 1926

Districts	Gasoline (Gals.)	Kerosene (Gals.)	Gas and Fuel Oils (Gals.)	Lubricants (Gals.)	Wax (Lbs.)	Coke (Tons)	Asphalt (Tons)	Other finished products (Gals.)	Unfinished Oils (Bbls.)
East Coast	401,542,000	57,594,000	193,071,000	103,992,000	60,994,000	7,793	143,075	6,219,000	7,588,000
Appalachian	44,411,000	7,368,000	20,687,000	36,434,000	16,727,000	476	42	1,829,000	1,037,000
Indiana, Ill., etc	271,600,000	25,964,000	35,769,000	31,923,000	28,597,000	11,656	17,378	23,078,000	3,355,000
Oklahoma, Kans., etc	165,192,000	11,834,000	135,623,000	19,189,000	3,219,000	22,632	927	3,774,000	1,932,000
Texas	228,239,000	59,007,000	280,757,000	69,637,000	7,462,000	59,656	8,378	260,000	7,707,000
Louisiana and Ark	168,948,000	43,631,000	108,085,000	4,367,000	10,293,000	60,435	28,848	2,908,000	2,837,000
Rocky Mountain	203,063,000	11,043,000	56,489,000	7,646,000	8,744,000	53,515	9,428	114,000	1,724,000
California	443,730,000	78,162,000	.....	36,288,000	48,000	.....	31,877	9,618,000	*12,605,000
U. S. TOTAL	1,926,725,000	294,603,000	830,481,000	309,476,000	136,084,000	216,163	239,953	47,800,000	38,785,000
U. S. TOTAL March 31, 1926	1,936,336,000	293,907,000	851,234,000	320,883,000	130,341,000	219,820	195,052	51,119,000	39,098,000
Texas Gulf Coast	203,065,000	50,779,000	242,316,000	68,324,000	7,345,000	55,314	8,378	141,000	7,061,000
La. Gulf Coast	163,723,000	43,172,000	78,261,000	4,363,000	10,293,000	58,851	28,512	2,624,000	2,683,000

*Includes 5,100,000 barrels tops in storage.

pleted in April, 1,417, as compared to March, 1,304.

Of the various sections of the country the Oklahoma-Kansas area stands out as being mainly responsible for the increased total output. Production in Oklahoma showed an increase of 18,000 barrels per day. Kansas revived considerably by virtue of an 8000 barrel gain in daily average production. Arkansas checked its falling output for the first month since May, 1925—the peak month for the Smackover field. Production in California again showed a slight decline as the 600,000 barrel per day mark was approached.

For the eleventh consecutive month, total stocks of crude petroleum east of California declined. This decrease which amounted to 1,600,000 barrels, was made up of a decline in pipe-line stocks of 4,100,000 barrels and an increase in refinery stocks of 2,500,000 barrels. In California the crude stock situation underwent a radical change as a result of the disastrous series of fires. Stocks of refinable crude were depleted by over 5,000,000 barrels, and stocks of heavy crude and fuel oil, by 2,000,000 barrels. The total loss of all oils from these fires was reported as 8,215,000 barrels.

REFINED PRODUCTS: Runs to stills of crude petroleum during the month of April, 1926, totaled 61,289,000 barrels, of which 3,590,000 barrels was foreign crude petroleum. This was a gain in daily average crude runs over the preceding month of 1 per cnt.

Gasoline production broke all records as 987,633,000 gallons, or 23,515,000 barrels, was produced. This represents a daily average production of 32,921,000 gallons, or 784,000 barrels, which, compared to the preceding month, is a gain of 5 per cent, and to April, 1925, a gain of 13 per cent. This production represents a gasoline recovery from the crude oil run to stills of 38.4 per cent, the highest ever recorded. Exports of gasoline also set a record figure—the total for the month, 185,000,000 gallons (4,400,000 barrels) exceeding by far the previous high figure—that for January, 1926, when 144,000,000 gallons was shipped out. Domestic demand for the month amounted to 831,410,000 gallons or 19,795,000 barrels, a gain in daily average over March, 1926, of 10 per cent. Stocks of gasoline were reduced 10,000,000 gallons during the month to a total of 1,926,725,000 gallons, or 45,874,000 barels, on hand April 30, 1926. By the usual method of computation, these stocks represent 64 days' supply, which compares with 73 days' supply on hand a month ago and 61 days' supply on hand a year ago.

The less important refined products experienced very little statistical change during April. Stocks of both lubricants and gas and fuel oils (east of California were again drawn on. On the other hand, stocks of wax are still on the increase.

Faragher Goes To Dubbs As Research Director

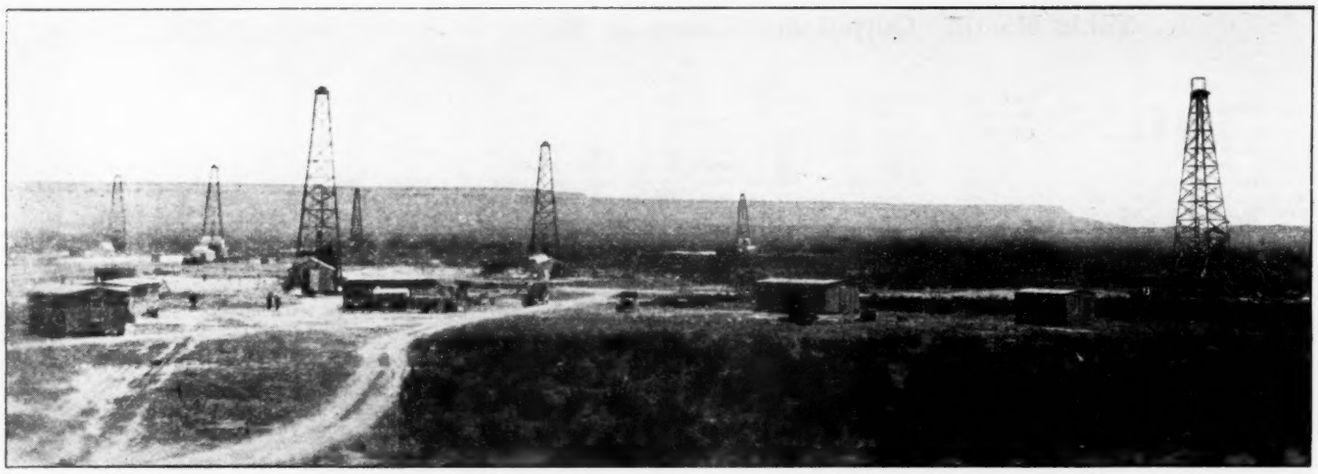
PITTSBURGH.—Dr. Edward R. Weidlein, director, Mellon Institute of Industrial Research, University of Pittsburgh, has announced the resignation of Dr. Warren Fred Faragher as assistant director of the institute. Dr. Faragher has accepted the directorship of the research laboratory of the Universal Oil Products Co., Chicago, (Dubbs), and assumed his new duties on June 1.

Dr. Faragher, who is a recognized authority in petroleum chemistry, has had a distinguished career at Mellon Institute where he has been located since 1918. He was the holder of the first industrial fellowship arranged for at the University of Kansas by the late Robert Kennedy Duncan, the first director of Mellon Institute, and after nine years' subsequent industrial experience in the manufacture of oil products and soaps he was selected as the senior incumbent of Mellon Institute's multiple industrial fellowship on petroleum.

In 1924 he was made a member of the institute executive staff.

While at the University of Pittsburgh, Dr. Faragher organized the department of petroleum refinery technology in the School of Mines and has since served as the departmental head.

He is also a past-president of the Robert Kennedy Duncan Club of Mellon Institute and a past-chairman of the Pittsburgh section of the American Chemical Society; he has been especially active in the affairs of the petroleum division of the American Chemical Society and on various committees of the American Society for Testing Materials.



General view of Hurdle district wells north and northeast of McCamey and Johnson discovery, now owned by Republic Production Co., in southwestern Upton county.

Fresh Activity Appears in Discovery Area of Hurdle District

By Paul Wagner
N. P. N. Staff Writer

NINE new locations of the Marland Oil Co. of Texas in the Hurdle district, coupled with fresh operations of the Republic Production Co. and the Gulf Production Co., offsetting the discovery well, are again directing attention to southwestern Upton county, Texas.

The Republic's No. 2 Baker and the Gulf's No. 1 Baker are drilling one location southwest and one location southeast, respectively, from the discovery well, in sec. 8, Groomes survey, which is shown in the foreground at the left of the accompanying picture. The Gulf and Republic wells had not been rigged up at the time the picture was taken.

Section and survey lines in this part of Upton county run northwest-southeast, the accompanying picture being taken at a point which shows wells completed by the Dixie Oil Co. and the Independent Oil & Gas Co., back of and to the left of the discovery. Other wells in the picture are on the Burleson and Sanger properties of the Marland company, which has made its new locations on these tracts as follows:

A-1 Burleson, 330 feet from the northwest and northeast lines of sec. 4 block R, GC&SF survey, east of the discovery well; No. 4 Burleson, on its 480 acre lease in sec. 100, T. C. Jones survey, 660 feet southeast of the No. 2 producing well; No. 5 Burleson, 660 feet southeast of the No. 3 producing well; No. 6 Burleson, 660 feet southeast of No. 5; No. 7 Burleson, 330 feet from the south line and 990 feet from the east line of the same lease: No. 8 Burleson, 2196 feet from the south line and 2970 feet from the east line of the same lease; No. 3 Sanger, in the J. H. King survey, 740 feet south of No. 2 Burleson; No. 4 Sanger, a direct offset to No. 4 Burleson; and No. 5 Sanger, a direct offset to No. 3 Burleson.

DIXIE Oil Co., Inc., subsidiary of the Standard Oil Co. of Indiana, swabbed 180 barrels in 12 hours on May 26 from its No. 3 Burleson well in Sec. R, Block 100, in the Hurdle district, southwestern Upton county, Texas, and extended production nearly two miles northwest of the Baker discovery well now operated by the Republic-Marland partnership. The Burleson well showed about two million cubic feet of gas daily at the completion depth of 2211 feet. It is one of the few wells in the Hurdle district making gas with the oil.

No. 2 Baker of the Republic-Marland interests, is standing 500 feet in oil, one location from the discovery well.

The Marland company owns a 25 per cent interest in the 320 acres on which the discovery well was drilled. It retained this interest in partnership with the Republic Production Co., which paid $500,000, partly in oil, for the 75 per cent that belonged to Johnson & McCamey, who also transferred about 800 acres of other leaseholds in trade that followed the original finding of oil in the Hurdle district last September.

Republic Production Co. finished the discovery well for about 50 barrels daily after first deepening it and then plugging back to approximately the 2230 foot level, where it was shot. The well has been worked over at various times and recently has not produced consistently.

Its original completion was the reason for the drilling of two wells north and slightly east of the discovery by the Dixie Oil Co.; one well northeast by the Independent Oil & Gas Co.; and the three wells now producing on the Sanger and Burleson properties of the Marland Oil Co. of Texas.

Individual Well Production

THE Dixie's two wells have made as high as 25 barrels each, daily, on the pump, efforts to increase their yield having invariably failed. They are now rated good for about 15 barrels daily. The Independent's No. 1 Burleson is now good for about eight barrels of oil daily, which is accompanied by an equal amount of water.

Marland wells, which are the best so far completed in the field, will swab about 250 barrels combined production for the three, as follows; No. 2 Burleson, 45 barrels; No. 3 Burleson, 160 barrels; No. 1 Sanger, pumping 40 barrels; No. 1 Burleson was never drilled, the location having been abandoned some time ago.

The No. 3 Burleson produced as high as 170 barrels daily late in May, soon after its completion in the lime pay horizon at about 2200 feet.

Oil Moved on Tank Cars

OIL from this part of the Hurdle district is now being moved out regularly in tank cars loaded at the field settlement of McCamey, on the Kansas City, Mexico & Orient railroad, about five miles south of the discovery well. The Marland interests built a short pipeline into the field, whch connects

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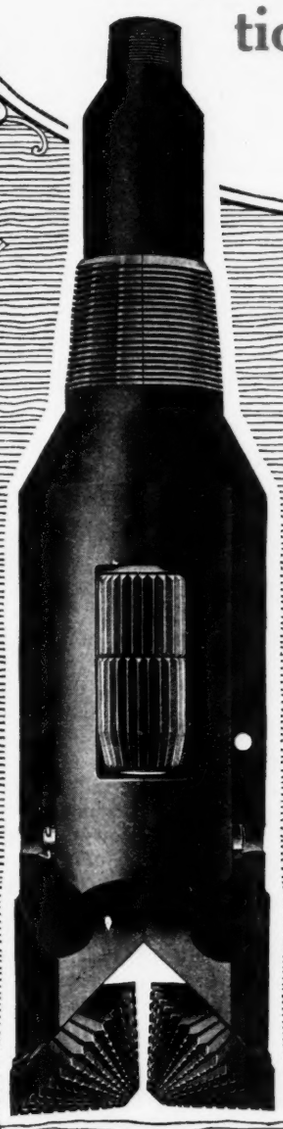

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The oil gathering system is also to handle crude produced along the Crane-Upton county boundary, about six miles northwest of the discovery area, where the Independent Oil & Gas Co. brought in the first well on the Len Taylor land, sec. 6, H. T. Sapp survey, Crane county.

Second Productive Spot

THERE are now three wells in the area of the Independent-Taylor, the two latest completions being the No. 1 Benton Land Co. of the Marland Oil Co., and the other the No. 1 E. S. Hughes of the Dixie Oil Co. These are located, respectively, in the Prater survey and the William Teer survey, along the Upton-Crane county boundary. A well of Zoch & Marland in sec. 92 of the Keith-Hughes tract, a few miles north in Crane county, is good for about 20 barrels daily as compared with first estimates of 75 barrels at 2564-2570 feet.

The Independent's Taylor is flowing 120 barrels from a total depth af 2045 feet; the Benton Land Co. well of the Marland interests picked up its pay at 2345-2353 feet, filling up 2000 feet of oil in the hole in the first 36 hours and afterward swabbing 60 barrels daily; and the Dixie's Hughes filled up about 1600 feet of oil in the hole from 2067-2090 feet.

New Locations on Crane

THREE new Crane county locations of the Marland Company in this area are its B-1 Ed S. Hughes, in the Julia Prather survey, offsetting the No. 1 Benton Land Co.; C-1 Ed S. Hughes, 330 feet from the north and east lines of sec. 85, block X, in the CCSD, RG&NG survey and the No. 1 W. F. Durham, 330 feet from the east and south lines of sec. 82, block X.

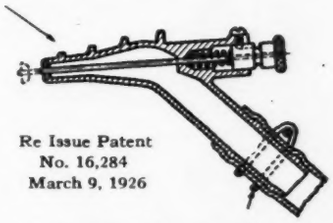
Six miles east and slightly south of the discovery area in Upton county, a test of the Plateau Oil Co., and others, southwest of the railroad stop of Hurdle, was finally abandoned some time ago when water drowned out its original daily production of about 10 barrels at 2234 feet.

Had the Plateau test, on Union Land Co. acreage, resulted in the completion of a producing well the Hurdle district would have been proved for some kind of oil for a distance of about 12 miles in a northwest-southeast direction.

The mystery of what to expect from the Hurdle district remains to be solved by future drilling. It has been proved that good small wells will produce in the Upton county discovery area and adjacent to the Independent-Taylor completion in Crane county. Whether this production will link up along a narrow "shoestring" trending southeasterly to the area of the Plateau's showing near Hurdle, or whether minor "highs" will localize yields to separate small fields, has yet to be solved.

Hurdle district production has in common with the World pool of northern Crockett county the fact of its coming from the lime horizon below the base of the salt deposits of the region, both giving up their oil at drilling depths above sea level.

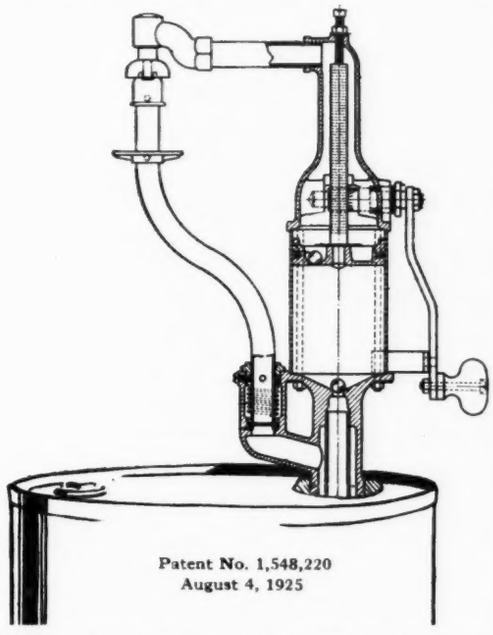
Below are shown the four articles on which The Marvel Equipment Company's patents appear to be most universally infringed.



Re Issue Patent
No. 16,284
March 9, 1926

One Man Grease Nozzle

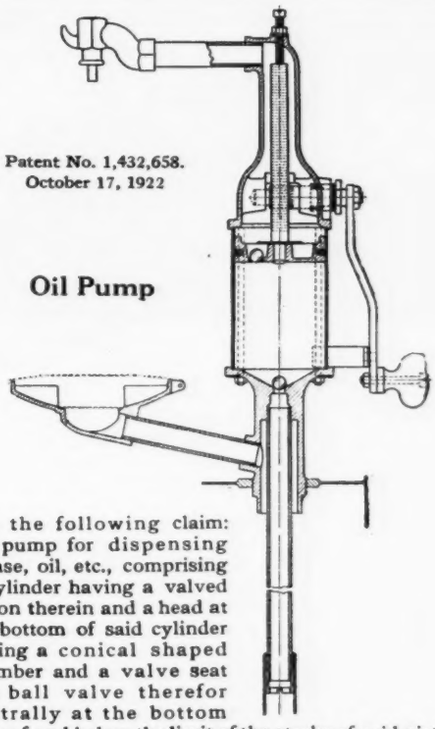
Claim 8 is one of the fourteen claims of this patent which reads as follows: "A gravity locking nozzle having a plural number of locking elements in spaced relation longitudinally thereon extending different distances from the axis of the nozzle, to permit gravity locking of the nozzle in filling openings of different sizes."



Patent No. 1,548,220
August 4, 1925

Swing Arm Return Pipe On Oil Pump

Claim 1 is one of the six claims of this patent. It reads as follows: "A liquid dispensing appliance, comprising a base member, having a chambered portion, a pipe rotatably seated within said chambered portion, a rotatable collar connected to said base member, and a coiled compression spring connected at one end to said pipe and at its other end to said collar to exert both an end thrust and a torsional force upon said drain pipe within said chambered portion.



Patent No. 1,432,658.
October 17, 1922

Oil Pump

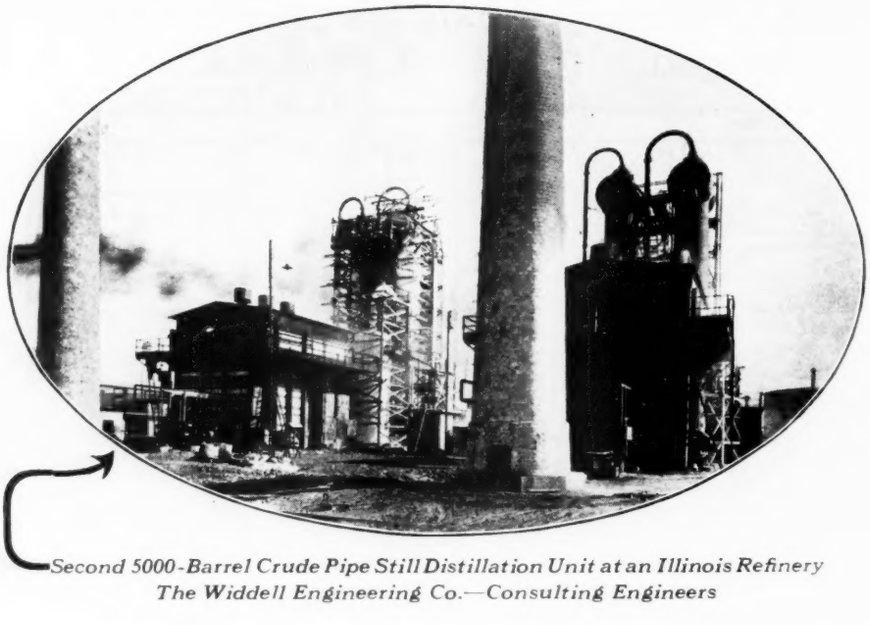
See the following claim: "A pump for dispensing grease, oil, etc., comprising a cylinder having a valved piston therein and a head at the bottom of said cylinder having a conical shaped chamber and a valve seat and ball valve therefor centrally at the bottom thereof and below the limit of the stroke of said piston to provide a clearance between said head and valve, an intake pipe connected with the intake end of said head, a rack shaft for said piston, a hollow head fixed to the upper end of said cylinder having a central depending guide for said rack shaft and provided with oppositely disposed lateral journals, a pinion shaft crossing the interior of said head engaging with said rack and mounted within said journals, and a plurality of tie rods clamping said heads to said cylinder."

Handy Express-type Truck

Claim 1 is one of the five claims of this patent. It reads as follows: "A hand truck, comprising a round axle, wheels mounted upon the ends of said axle, a pair of angular coupling members sleeved upon said axle, said coupling members having sockets, tubular handles secured within said sockets, and a pair of flat bars bolted to said members bent on converging lines and connected at their outer ends to each other and to a depending foot member.

Patent No. 1,544,356.
June 30, 1925.

MARVEL EQUIPMENT COMPANY
CLEVELAND, OHIO



Second 5000-Barrel Crude Pipe Still Distillation Unit at an Illinois Refinery
The Widdell Engineering Co.—Consulting Engineers

A pipe still distillation unit, if properly designed and constructed, affords the refining industry an investment of exceptional appeal, as is evidenced by the fact that a *second* 5000-barrel unit of *our* design has recently been completed at the Illinois refinery illustrated above.

Under normal operating conditions a unit of this design will, by increased yields and operating economies, pay for itself within a comparatively short time. Subsequent operation converts these savings into profits.

We will appreciate the opportunity of presenting further to you the many advantages and economies effected by this equipment.

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Gates, Gates Everywhere, Searching Texas Pastures for Oil Fields

By Paul Wagner
N. P. N. Staff Writer

THE day I visited the Herscherson test of the Dixie Oil Co., in sec. 6, block 10, western Pecos county, Texas, the 40-mile drive from Fort Stockton seemed a rather long journey for the purpose of seeing a single wildcat well.

But, as my companion and I set out on our mission, we bade God-speed to a scout of one of the major companies who was heading in another direction to visit for the first time a new test that added 180 miles to his territory; 90 miles out and 90 miles back, with 28 gates to be opened and closed twice.

Something of that scout's regular duties had been indicated to us the previous day, when we attempted to drive about 30 miles northwest from central Crane county to Monahans, on the Texas & Pacific railroad, taking in the Hutchins test of the Gulf Production Co., in sec. 47, block N, Ward county, on the way.

Gates formed an important phase of that unsuccessful expedition, but other causes (or effects) were responsible for our failure to reach either the Gulf test or Monahans. Parenthetically, we had emphasized to us the need for good eyes to pick out main traveled trails through mesquite patches, sand dunes and West Texas pastures after a rain. We were not lost, for we knew exactly where we were all the while, but as for finding which trail would take us where we wanted to go—that was another matter.

Wherever we turned, whether exploring a trail or doubling back to investigate another, we were invariably faced with gates, which became to us the western equivalents of the justly infamous "Thank-You-Ma'ams" of the eastern United States.

An essay might be written about gates out here in the "vast open spaces," which, again parenthetically, is a term really elementary in its description of much of the territory traversed. The open spaces would be more open if it were not for gates, but with this single exception the term is woefully inadequate to a visualization of the seemingly endless terrain.

It is related in this part of the country that a rancher in Winkler County, which adjoins Ward on the north, stood on his constitutional right to be tried by a jury of twelve men after he had recently killed a Mexican. He went free when it was found there were only seven individuals in the county qualified to sit as jurors. Either that rancher knew his legal gate, or his lawyer was a good gate opener.

As for ranch gates, however, they consist of two kinds, the barbed wire gap that is held taut by a piece of wire that slips over a pole and the regulation wooden gate of the Middle West. The last mentioned type is of somewhat lighter construction than in the farming communities of the north, but it is equally hard to open; seldom being hung on its hinges so that it will swing clear of the ground. Invariably this kind of gate requires dismounting from one's vehicle to open and close it, a requirement also of the wire gap.

Dixie Oil Co.'s Herscherson test, western Fecos county, Texas, showing northeast dip of beds in background

There are to be found in this part of the state none of the cattle guards common to western Kansas or the staked plains region Texas; nor are there any of the swinging gates of the Edwards Plateau country, which hang on a pivot pole, permitting passage at its right after a gentle bump of the car.

Tests Away From Railroads

IF through luck, or otherwise, a wildcat test is found drilling anywhere near a railroad in this part of Texas there instantly arises the question of what influenced its location.

Arthur Stilwell, who built the Kansas City, Mexico & Orient railroad through this region, has publicly admitted that "the Brownies told him to do it." The question arises, preforce, as to what influence, if any, the Brownies had on the oil men wildcatting the territory.

Since the Hurdle district became productive, along the Crane-Upton county boundary, the visible population has congregated at the twin settlements of Crossett and McCamey, or else out on the leases. The district takes its name from the "town" of Hurdle, which is boldly identified by a signboard alongside the K. C. M. & O. railroad, some eight or ten miles east of McCamey.

Not having progressed sufficiently in spiritualism to discard the use of material eyesight, or the trapping of vocal sounds by the usual type ear-drums, the writers recent visit to Hurdle resulted in no prolonged conferences.

There can be no doubt of the value of populated centers built up after the manner of Hurdle, however; they save time for executives visiting the territory since most of the oil officials (so far as it has become publicly known) are also lacking in specialized eyesight and hearing. This combination of circumstances avoids the necessity of listening to long-winded harangues emanating from Chambers of Commerce and other booster organizations. Unless you've been there you'd be surprised what an advantage that is.

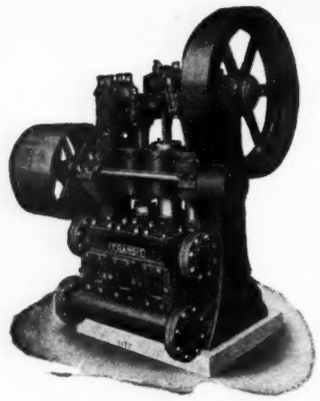
Now it may be understood why it was that we bade God-speed to that major company scout as he left Fort Stockton on his bi-weekly round of the territory he covers. We had left the sand hills that extend from northern Crane, into Ward, Ector and Winkler counties, the previous day; he had still to make them as he nosed his car back from a swing into eastern Pecos and Terrell counties.

Dixie's Herscherson Test

THE Herscherson test of the Dixie, which we now visited, is drilling in an area of Comanchean Cretaceous outcrops surrounded by Pleistocene alluvium, near the boundary of Reeves and Pecos counties, not more than 12 miles from their juncture with the Jeff Davis county line. The Barilla extension of the Davis mountains form a western background for the test. To the east spreads out the narrow but fertile Pecos Valley, and beyond it miles upon miles of pasture and waste lands.

Aside from the present depth of the test, below 4600 feet, and the observable dips that indicate the structure plainly to the veriest layman, the Dixie's wildcat is interesting for two things: it found a showing of oil in the lime horizon at about 3800 feet and a salt thickness of more than 1000 feet was penetrated on the way down.

The Dixie now has 5-inch casing on the ground to carry the hole down for



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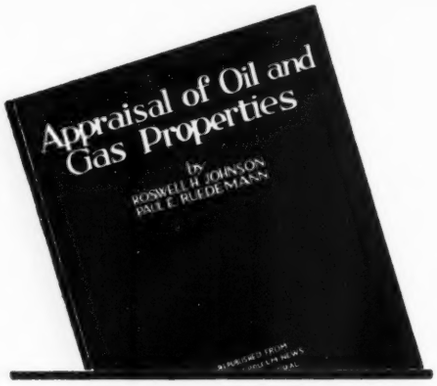

"APPRAISAL OF OIL AND GAS PROPERTIES" by Dr. Roswell H. Johnson and Paul Ruedemann gives more detail as to working methods, with drawings and charts, than has ever been offered the oil industry in a work on appraisal.

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a thoroughly deep test. At 4600 feet, the hole was carrying about 1200 feet of water from above. Drilling had been in gray lime below 4015 feet, where this formation was topped. Virtually solid salt was found in the Herscherson test from 2710 to 3725 feet; and more of it at 3825-3900 and 3975-4018 feet.

Depth to the base of the salt in the vicinity of the Herscherson test is peculiarly interesting because of the area's proximity to an inferred barrier reef extending in Permian time from the Guadalupe mountains, on the New Mexico boundary, to the Glass mountains of Texas. It was the inflow of sea waters, their recession and subsequent progression, that probably caused the chemically deposited beds of the West Texas Permian basin to be originally laid down. (See page 81, April 7, 1926 issue of National Petroleum News.)

The existence of this old barrier reef has been substantially proved by the segment of Capitan limestone found in the Guadalupe range, which correlates with the Word formation of the Glass mountains. The Capitan extends only a short distance north into New Mexico from the place where it may be seen in Guadalupe peak, and all remaining evidence points to its having once persisted across the space now between it and the Glass Mountain area of the Word formation.

Depth to the base of the salt in the area of the Herscherson test may indicate old basin conditions that had to do with the spilling of the inflowing and receding waters over the inferred barrier reef; at any event drilling to the base of the salt there reaches a greater depth than elsewhere near the rim of the Permian basin.

Oil Shows In Ward County

OUT in the center of the Basin, where the Gulf's Hutchins test is being drilled, a fair show of oil was found at 4210 feet and a somewhat better show was logged at 4495-4548 feet, where 1,000,000 cubic feet of gas appeared. The Gulf's Hutchins test is on a 70,000 acre lease taken some time ago, which is only one of a number of great blocks acquired by that company in Crane and Ward counties. In fact, this company leased several hundred thousand acres so nearly solid last year tha the scouts in the West Texas territory refer to its holdings as "Gulf county."

A general "high" on the top of the sal may be carried northwesterly through parts of Crane, Ector, Ward, Winkler and Gaines counties to the area of the Maljamar gasser, in 21-17-32, Lea county New Mexico, which is now reported showing small quanitities of oil in lime formation below 3600 feet. There is considerable doubt about structure mapped on top of the salt meaning anything with the regard to oil production, but sub-surface "highs" checked out on the base of the salt, or the top of the underlying lime, are regarded as having the greatest of significance.

The Church & Fields well now operated by the Magnolia Petroleum Co., in

University of Texas sec. 34, block 30, eastern Crane county, is believed to have made its maximum of 190 barrels daily from a lime "high" found beneath the salt of the old Permian basin. In this respect it compares with the known doming that occurred in the lime underlying the prolific Big Lake field of southwestern Reagan county, although yields are as yet in no wise comparable.

The Why of It All

IT is the effort to get in tune with these "little Brownies" that is causing the expenditure of millions in the leasing up and wildcatting of great tracts from the Trans-Pecos region east to the Edwards Plateau and north into the southern part of the Llano Estacado, or staked plains, throughout virtually all the area underlain by the Permian salt deposits.

The approximate scale of prices being paid for spreads of protection acreage around drilling wells has reached as high as $10 to $15 an acre in Ector county; from $8 to $12.50 an acre in Winkler county; and as high as 50 cents to $2 an acre for checkerboard leaseholds in Andrews county. Checkerboard acreage in Ector has moved at $2.50 to $7.50 an acre and in Winkler for $1.50 to $7.50 an acre.

After paying $1 an acre and 25 cents yearly rental for about 13 sections in Andrews county, the Humble Oil & Refining Co. moved on north into Gaines county, where it has leased up about 80,000 acres on a nominal basis not made public. The Gaines county acreage is almost due east of the Maljamar gasser, in Lea county, New Mexico, which showed traces of oil about 500 feet below its gas flow.

There are no tests drilling in Andrews county and the only one in Gaines is that of Munday et al, PSL sec, 17, block C-30, which is now shut down at 870 feet.

In Winkler county, Westbrook et al have been under-reaming 12-inch casing at 850 feet on the Hendricks ranch; Brandon & McCamey have a location on the Abrams ranch and Ed. S. Hill et al are getting ready to drill on the Amberguy.

As examples of Winkler county trading, the Pure Oil Co. got sec. 40, block 46, township 1 north, at $3 an acre bonus and the Skelly Oil Co. took sec. 1, block B-2, school lands, at $2.50 an acre, 25 cents rental, on 10-year lease.

In Ector county, where seven wildcat locations have been announced, extensive leasehold purchases have been made by the various companies operating in west Texas.

Protection Acreage High

THE higher priced acreage has been invariably close to one or another of the test wells to be drilled by J. C. Cooke on the Henderson ranch; J. S.Cosden and others on the Connell; the Exploration Co. on the Slater; the Independent Oil & Gas Co. on the Johnson; Skinner et al on the Buchanan; and Zweifel et al on the Johnson.

S. C. Park, driller on the Dixie Oil Co.'s Herscherson test.

Pure Oil Co. paid $10 an acre for the west half of sec. 18, block B-15, and $1.25 an acre for the west half of sec. 11, block B-4. Texas Pacific Coal & Oil Co. paid $5 an acre and agreed to drill a test well in acquiring secs. 16 to 21 and 28 to 30, block 42, township 2 south, Texas & Pacific railroad survey.

Gulf Production Co. paid $10 an acre for three and a half sections of protection around the Skinner test; and paid a total of $4800 for 320 acres out of sec. 27, the west 320 acres of sec. 7, block 43, township 3 south, Texas & Pacific; the northeast quarter of sec. 17, the southwest quarter of sec. 5, block 44 township 3 south; and the southeast quarter of sec. 31, block 44, township 2 south, Texas & Pacific.

In Pecos county, the Humphreys Corp. paid from $1.50 to $2.50 an acre for five year leases carrying 50 cent rentals, on the following acreage: south half of sec. 10, south half of sec. 7, all of secs. 2, 12, 13, 27, 29, 30, 31, 32, 33, 34, and the north half of 28, in block 2, H&TC. survey; secs. 116, 117, 119, 123, 124, 126, 127, 128 and 136, H&GN survey.

The Gulf paid $48,000 for 1600 acres around each of the two locations made by William Dunning, Jr., on the McElroy ranch, in western Upton county; and the Humble Oil & Refining Co. paid $150,000 cash and agreed to drill a 3500 foot test for nine sections out of the McElroy ranch, the tentative location being in sec. 30, block 42, Texas & Pacific survey; Dunning's locations are in sec. 144 and sec. 155, both in block E. The Gulf has made a location in sec. 203, block F.

In Crane county, where the Simms Oil Co. paid $5 an acre for eight sections in block 43, township 4 south, carrying 60 days drilling clause, a considerable protection acreage has been taken up by others. The Simms acreage is in secs. 41 to 45 and secs. 5 to 7.

The Gulf paid $9,600 for a spread consisting of the southeast half of sec. 42 and the northeast quarter of sec. 44, block 43, township 3 south; the southwest quarter of sec. 6 and the southeast quarter of sec. 5, block 43, township 4 south. It also paid $3,600 for the east 320 acres of sec. 15, block 43, township 4 south; the west 320 acres of sec. 17, block 42, township 4 south; and the west half of sec. 39, block 45, township 1 south.

Pure Oil Co. paid $3.50 an acre for the west half of sec. 16, block 46, school land; and the Roxana Petroleum Corp. got a spread around the Cranfill Bros. test on the Lea ranch, for an unnamed consideration, acquiring secs. 15, 16, 21 and 22.

Dixie Oil Co., producing subsidiary in the southwest of the Standard of Indiana, paid $12.50 an acre for the southeast quarter of sec. 26, block B-6, H&TC survey; $8.50 an acre for sec. 17, block 35, H&TC; and $10 an acre for sec. 2, in the extreme corner of Crane county.

Profits Made In Acreage

THE acreage prices mentioned affect transfers made in the last few weeks only. Vast blocks taken up previously were acquired at various prices and in many instances profits were made by brokers in selling off smaller parcels. In some cases the "farming out" of acreage on drilling contracts has been practiced after the manner pursued by the Marland Oil Co. of Texas in Upton, Crockett and Reagan counties, among others.

That these last mentioned counties have not been entirely forgotten in the the present dash out into the center of the basin is indicated by the currently announced blocking by the Magnolia Petroleum Co. of 12,000 acres in southwestern Crockett county. The acreage is in blocks MM and NNN, T&ST.L. survey.

This vast wildcatting play, which got its real inception from the development of the Big Lake field as a prolific source of high grade oil, now reflects two things:

(1)—The constant search for deposits of petroleum, wherever they may be found, and (2)—widespread gambling in what was once cheap acreage originally taken up mainly by brokers.

As the acquisition of acreage proceeded, the companies turned more and more toward a policy of acquiring leaseholds direct, instead of taking protection out of blocks drilled by wildcatters; although both practices still prevail.

The opening of the World pool, in northern Crockett county, and the Hurdle district, along the Crane-Upton

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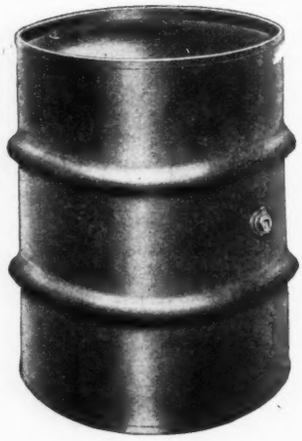

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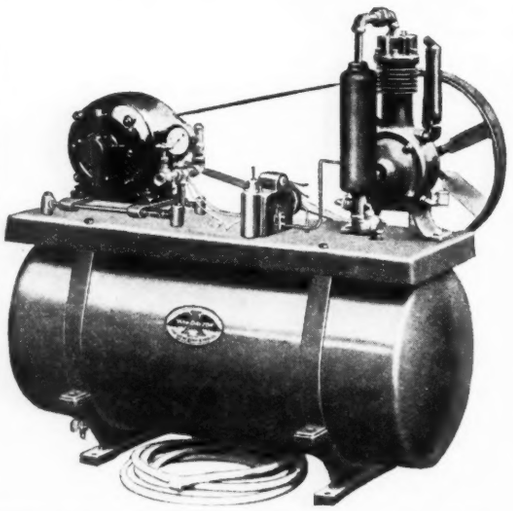

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county boundary, spurred interest. But their failure, as yet, to result in anything but small well developments merely whetted the appetites of the industry for a search farther afield in an effort to find the future production it is felt sure will be comparable with Big Lake.

Look what a lot of present day trouble and expense the poor little water algae brought upon the petroleum industry when ages ago these organisms floated about in the surface waters of the Permian sea in west Texas. Had they not become pickled and dropped into the bottom ooze underlying the salt soon afterwards to be deposited by concentration and precipitation of sea waters the need wouldn't exist today to search out the scenes of their downfall at tremendous costs of money and effort. Still the country requires petroleum and its products, so why bemoan their fate. The king is dead, long live the king.

Really this whole west Texas situation involves problems of serious magnitude, so, gentle reader, you'll please pardon me for the occasional lapses I've taken into more or less weighty phases of it. Frankly, I set out to write an essay on gates and to extol the lack of them between Fort Stockton and the Herscherson test well. Just look where it led me.

Constantin Market Plant Sold to Continental

Staff Special

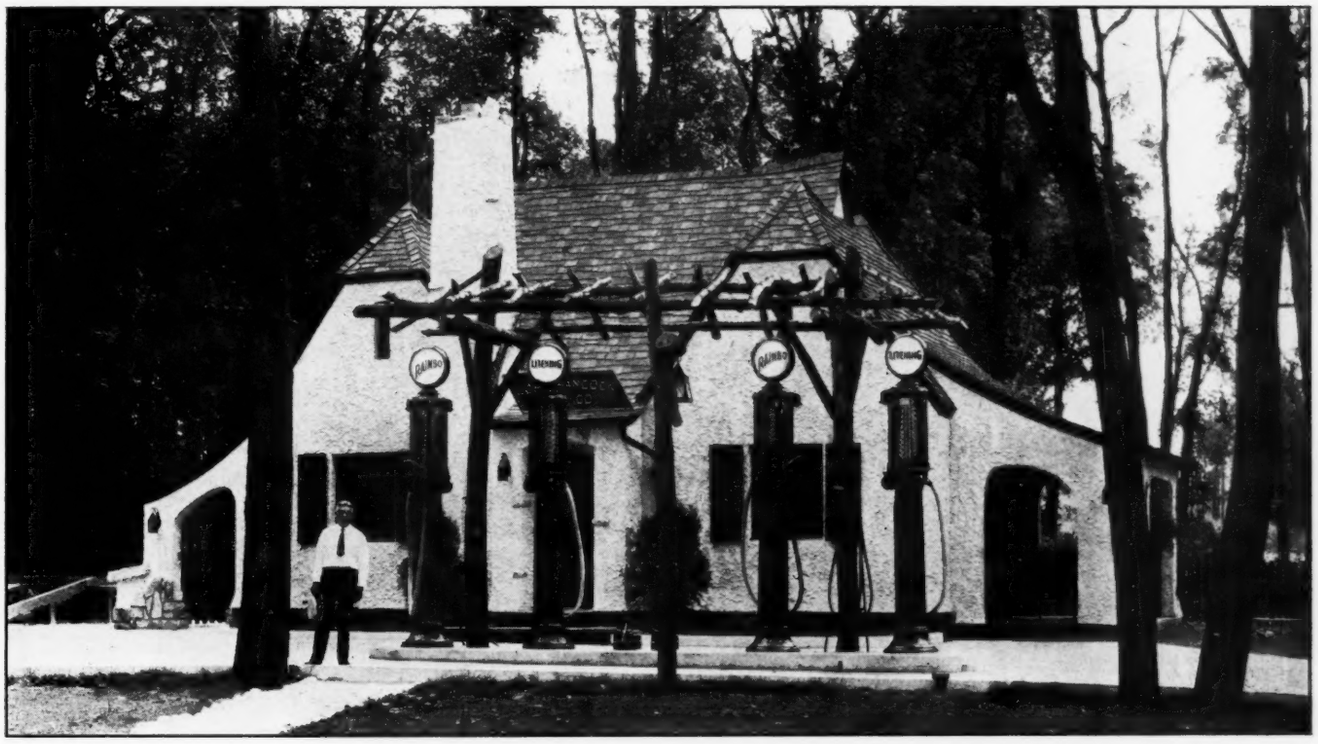
TULSA, June 4.—Distributing properties o fthe Constantin Oil Corp., subsidiary of the Constant Refining Co., have been sold to the Continental Oil Co. The properties include a bulk station at Tulsa with five service stations and additional stations at Pawhuska, Bristow, Bartlesville, Collinsville and Nowata and a bulk station at Broken Arrow.

Since its purchase of the Sapulpa Refining Co.'s refinery at Sapulpa the Continental has been building a distributing system in various parts of Oklahoma. Within the last few weeks the company has been building several beautiful white tile stations in Tulsa. With the Constantin properties the company will have nine service stations in Tulsa.

The Continental Oil Co. formerly marketed petroleum products in six states in the Rocky Mountain region. Since merging with the Mutual Oil Co. it has spread its activities into seven other states including Washington, Oregon, Arkansas, Kansas, Missouri, Nebraska, Oklahoma and North Dakota. It is now in active competition with the Standard Oil Co. of Indiana, Standard Oil Co. of California, Standard Oil Co. of Nebraska, Standard Oil Co. of Louisiana and the Magnolia Petroleum Co.

MILLER, S. D.—P. D. Peterson, agent for the Texas Co., Houston, has just installed additional storage tanks here.

Station is Replica of English Country Home



The quaint rustic charm of an old English country home is reproduced in this service station of the John Hancock Oil Co. on East River Blvd. in St. Paul. In keeping with its style of architecture, the station is equipped with the old lantern-type of lamp, shuttered windows, and rough timber in canopy effect over pump islands. Trees in the background lend to the artistic effect. John Hancock, president of the company, is standing in the foreground.

MINNEAPOLIS, MINN.—Roughhewn timbers, old English type of architecture, and a background of tall, stately trees, form the artistic features and rustic setting of the East River Boulevard service station at St. Paul of the John Hancock Oil Co., marketer of Litening and Rainbo gasoline, with headquarters here. The station opened for business a few months ago.

The building follows the design of an English country home. It is of mill construction finished in stucco. The gabled roof of variegated shingles slopes gracefully to either side, covering the ladies' dressing room on the one side, and patrons' waiting room on the other.

Careful adherence to detail is shown in the use of shutters at the windows and at the long narrow slits near the top of each gable. Instead of the familiar type of frame canopy, this station uses small rough timbers cut to measurement, which greatly enhance the rustic appearance.

The location of the station is a corner of park property on the boulevard near the Ford plant, and, when looking at it from the pavement, it has the appearance of being set in the woods. The building sets back 120 feet from the boulevard. Spacious driveways accommodate three cars, and there is a deep lawn in front. John Hancock, president of the company, is standing in the front of the station in the accompanying picture.

The ladies' rest room is completely furnished, with dresser, rugs and other modern equipment. An artesian well on the property provides ice cold water which is piped to an imitation well in front of the station in the center of the lawn for the convenience of motorists.

At night the station is illuminated with rustic lights which shed a soft golden hue over the property.

That the station is one of the most artistic and pleasing in the country has been proven by its wide appeal to the public, says Perry C. Sanborn, secretary of the company. Letters of commendation and inquiries for specifications have reached the company from all parts of the country. An individual in Philadelphia recently wrote the company for plans for the building, stating that he wanted to build a house just like it.

Stock Selling Operations Halted by Injunction

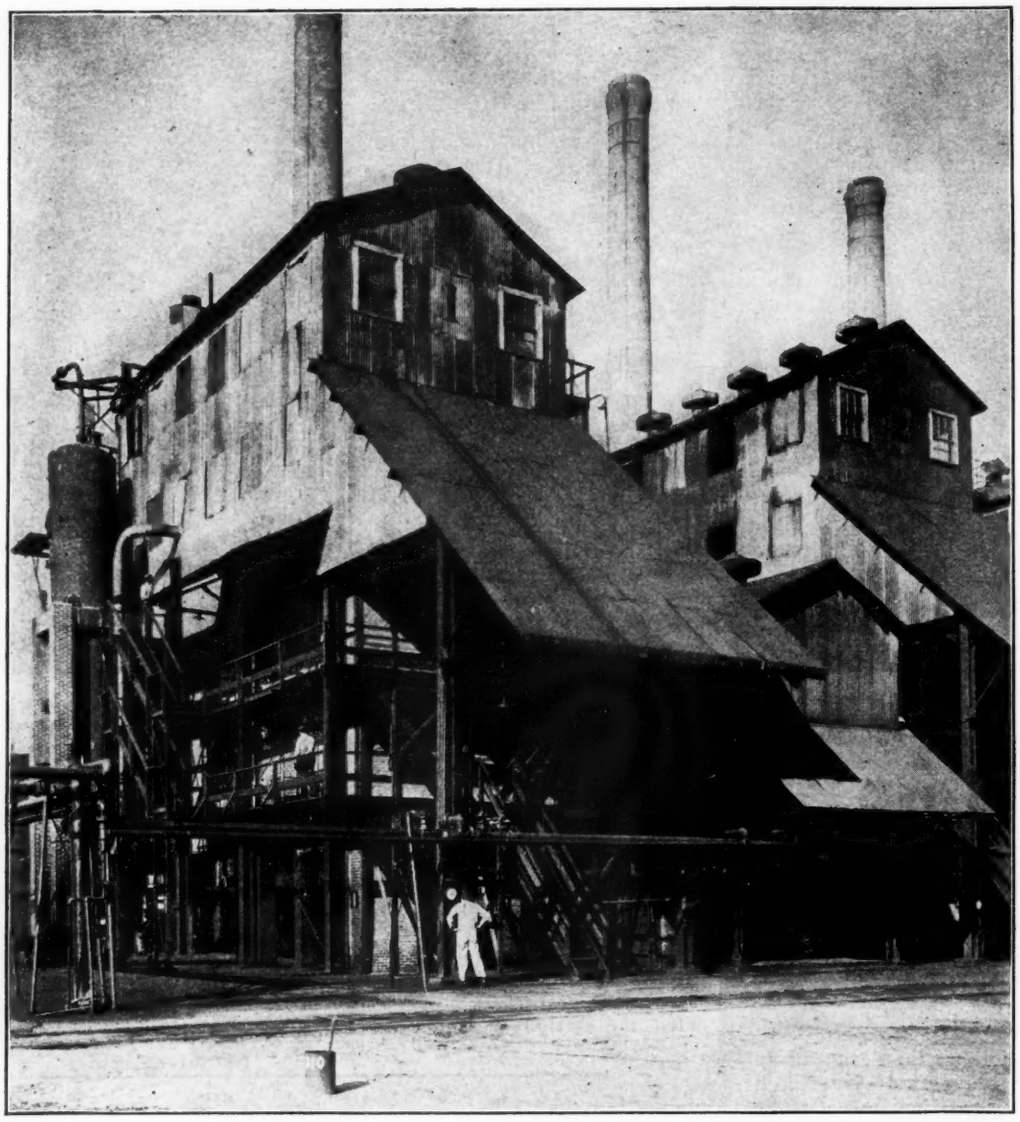
POUGHKEEPSIE, N. Y., June 3—A permanent injunction is being sought against the stock-selling operations of the Great Basin Oil Co., with headquarters reputed to be at Holbrook, Ariz., which has been extremely generous in dispensing dinner invitations to prospective stock purchasers in this state. The defendants have been called to show cause at a special term in Albany on May 22 why the injunction should not be made permanent.

The company has already been enjoined from further sale of its stock in New York state by Attorney General Albert Ottinger at Albany until further proof can be brought forward as to the reliability of the company.

The injunction was granted a few days ago by supreme court justice Ellis J. Staley of Albany and was directed against Charles E. Glasser & Co., New York City, the fiscal agent for the company; Charles G. Michener, New York City, and W. T. Clemens, Syracuse, who were named as promoters of the company.

It is estimated that the promoters, who "worked" Poughkeepsie under the claim of being devout Methodists and founders of the Silver Bay conferences for young people, took away $10,000 from gullible citizens, according to a Poughkeepsie newspaper clipping mailed to National Petroleum News by W. B. Murdock of The De Laval Separator Co., with headquarters here.

SHREVEPORT, LA.—Its twenty-fifth service station was opened here on May 12 by the Louisiana Oil Refining Corp., with headquarters here. The new station is located on one of the city's main thoroughfares. A new bulk plant was opened by the company on May 1 at Ferriday, La. E. N. Howard, who was formerly with the Pierce Petroleum Corp. at that point, is agent.



Unit No. 1, at the Port Arthur Works of The Texas Company

In service since February 8th, 1920
Total charge (to March 31, 1926,) 1,736,890 barrels

While this is an old type unit and has seen much service, it is still giving excellent results. This unit is now consistently charging over 25,000 barrels per month, although when first designed it was rated at only 15,000 barrels per month. , ,

The Holmes-Manley *Cracking* Process

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The Licensee receives:—

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Rules Out Undue Restrictions On Storage of Gasoline

CLEVELAND, June 5.

THE Supreme Court of Pennsylvania has decided that the officers of a municipality have not a right, under their police power, to impose unreasonable restrictions on the storage of gasoline.

This ruling is likely to have an important effect anywhere in the country where city or village authorities may try to set ridiculous limits on the amount of gasoline that may be held in storage, and such attempts crop up from time to time.

The case arose through the passage by the council of the borough of Manorville, Pa., a town of a few hundred, of an ordinance prohibiting the storage of more than 400 gallons of gasoline within the limits of the borough. The Sterling Oil Co., of which Samuel Messer is an officer, made a test case of it. This company had 36,000 gallons storage capacity in the borough which they filled, contrary to the ordinance, and their representative, Harry Flenner, was arrested and convicted before the borough magistrate.

The history of the case is thus recited by J. V. Frampton of the law firm of Frampton & Courtney, Oil City, Pa., who represented the Sterling Oil Co.:

"An appeal was taken to the court of quarter sessions of Armstrong county and the judge ruled that the court was without power to review the discretion of the borough's council on the question of the reasonableness of the ordinance and sustained the conviction.

"On appeal to the superior court of Pennsylvania that court reversed and following this reversal, the Armstrong county court found in accordance with our contention that the ordinance in question was one over which the power of review was vested in the courts and declared the ordinance unreasonable and adjudged the defendant not guilty.

"From this decision the borough appealed and the superior court affirmed the court below and from the judgment of the superior court an appeal was then taken to the supreme court of Pennsylvania and that court has recently decided that the ordinance is subject to review and unreasonable, affirming the superior court."

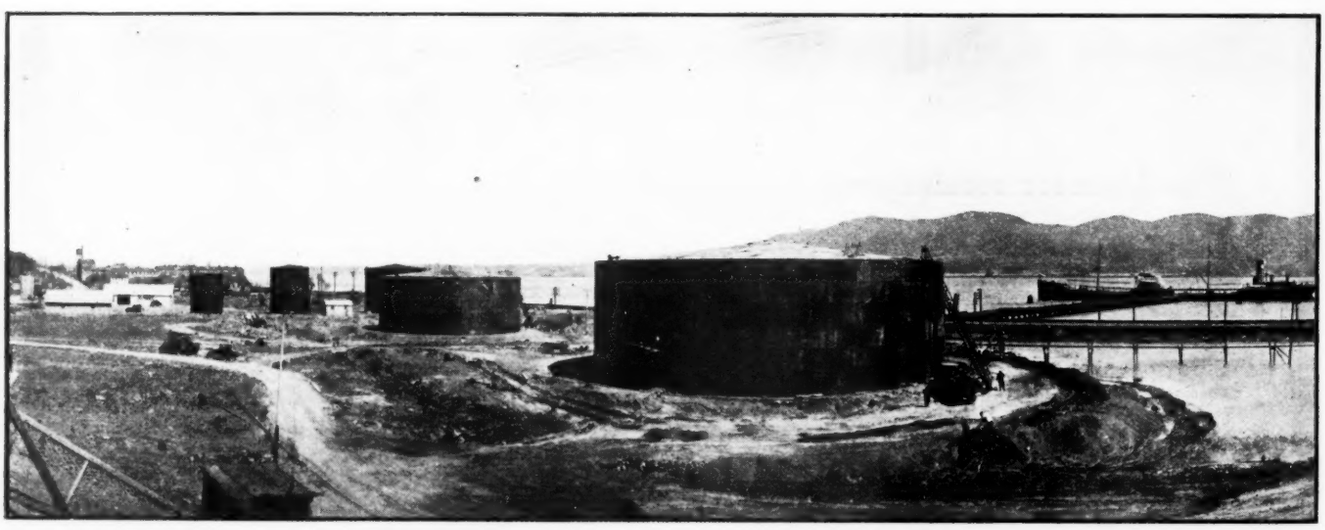
The court's ruling that large quantities of gasoline, properly stored, do not constitute a hazard, is likely to prove serviceable in many cases where the question comes up. The opinion of the court says:

"Summarizing the findings of the trial judge, which were not excepted to, he concluded that the storage of gasoline in unlimited quantities in properly constructed and equipped tanks such as those set up in plaintiff borough is not dangerous to life or property, and it can be and is stored in large quantities in thickly populated districts without danger, that the storage of the amount of gasoline provided for in the tanks in question, 36,000 gallons, is not dangerous within itself, if properly regulated, and, when properly supervised the use of such appliances for the storage of gasoline as have here been provided does not create a fire hazard to the traveling public or the inhabitants of plaintiff borough.

"Under these findings, it could not be determined otherwise than that the ordinance in question is unreasonable. It was conclusively shown that not the amount of gasoline stored, but the manner of its storage, determines the question of danger therefrom and that as here stored in modern scientifically constructed tanks it is not dangerous."

CLEVELAND, O.—James P. Kem, recently of Casper, Wyo., has opened law offices in the Fuqua Building, Amarillo, Tex. Mr. Kem has been a resident of Wyoming for several years, first at Newcastle and then at Casper. He has been attorney for a number of oil companies, including the Mammoth Oil Co., The Texas Co., Wolverine Oil Co. During the peak development period at Salt Creek, when operators got together to hold drilling to a minimum while the market was congested, Mr. Kem served as secretary of the conservation committee and thus became intimately acquainted with the field end of the oil industry.

WASHINGTON, June 4.—Regulations to guide oil producers in the making of income tax returns under the new depletion allowance, so-called, of the amended income tax law, probably, will be promulgated about the middle of June. The internal revenue bureau has been working on them ever since the passage of the act. W. N. Davis, Mid-Continent Oil and Gas Association, has frequently conferred with revenue officials on the subject.



The Pennzoil Co. which has been constructing a terminal on the Hudson river below Newburgh, N. Y. for handling gasoline in tank steamer lots, advises they have the plant completed far enough to begin operations and have already begun to unload tank steamers of gasoline at this point. The terminal occupies, 22 acres on the west side of the Hudson, and includes a dock running 630 feet out to deep water. It has completed construction at the present time of 160,000 barrels storage. The company plans to ship gasoline from this terminal to its customers throughout New York, New England and eastern Pennsylvania. The above picture was taken when the plant was under construction.

C. L. Suhr of Oil City is president of the Pennzoil Co. and R. A. Browne the director of sales. The terminal is to be operated by the New York state division, of which A. S. Matthews, of Buffalo is vice-president and general manager.

THE OIL IN RAMSES' *Lamps*

During the Rule of Ramses great temples were built.

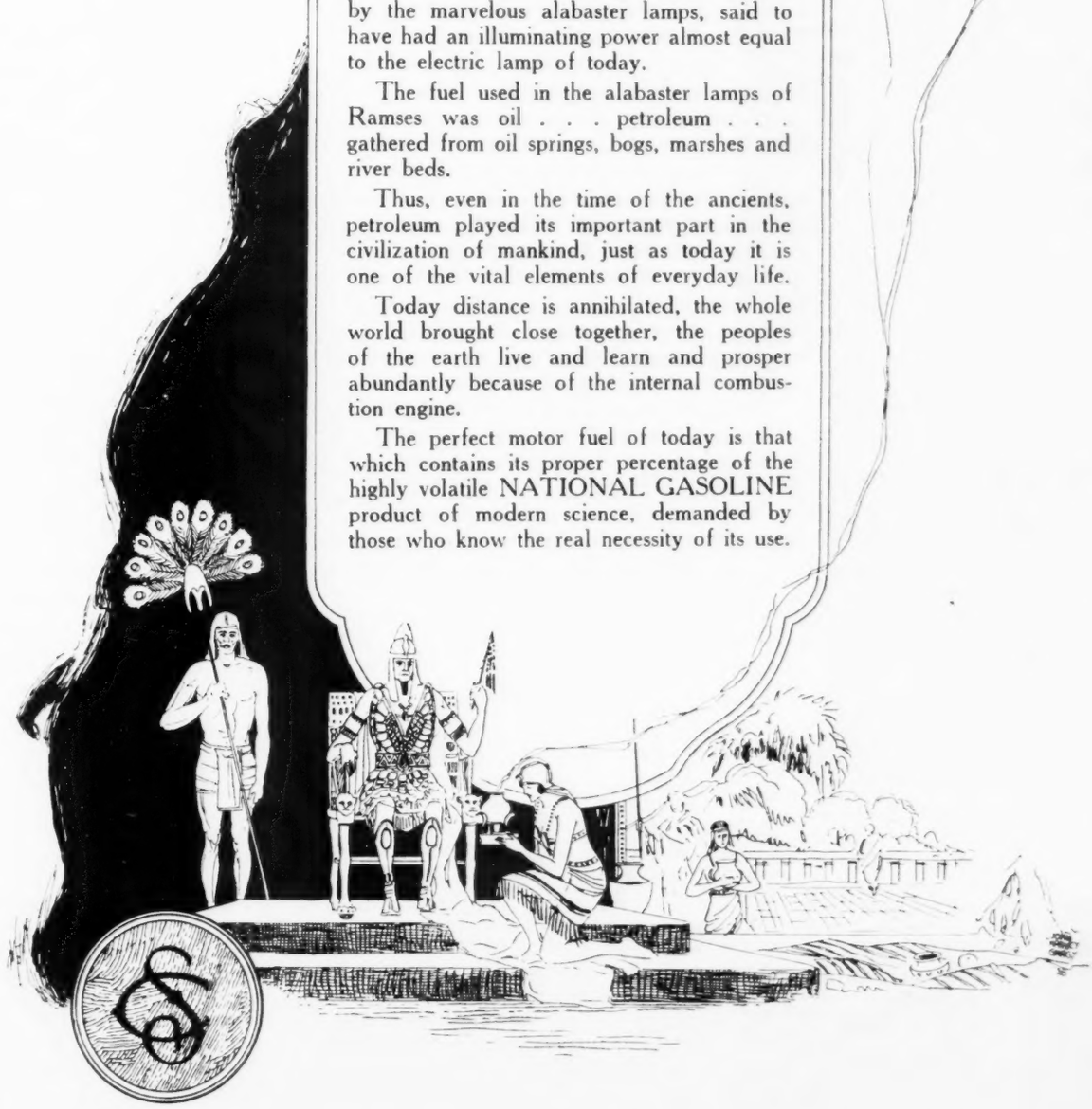
And these famed temples were lighted by the marvelous alabaster lamps, said to have had an illuminating power almost equal to the electric lamp of today.

The fuel used in the alabaster lamps of Ramses was oil . . . petroleum . . . gathered from oil springs, bogs, marshes and river beds.

Thus, even in the time of the ancients, petroleum played its important part in the civilization of mankind, just as today it is one of the vital elements of everyday life.

Today distance is annihilated, the whole world brought close together, the peoples of the earth live and learn and prosper abundantly because of the internal combustion engine.

The perfect motor fuel of today is that which contains its proper percentage of the highly volatile NATIONAL GASOLINE product of modern science, demanded by those who know the real necessity of its use.



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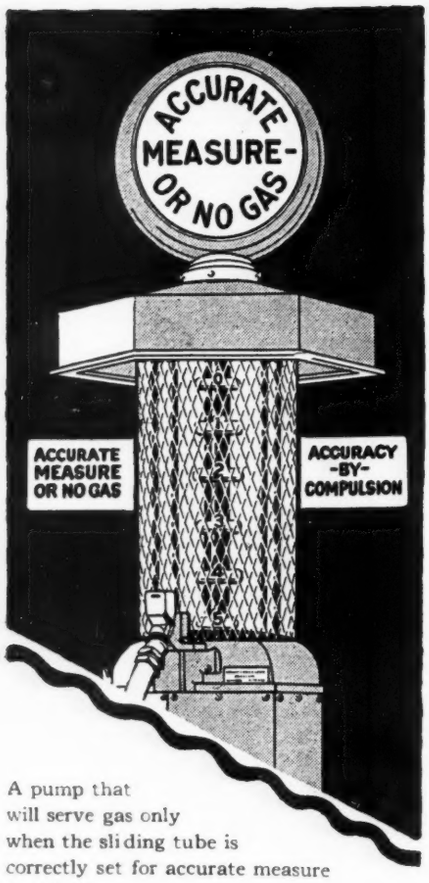

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"Compulsory-Accurate"

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Accurate Measure or No Gas

Sealers Report Oil Companies Aid Fight Against Short Measure

Staff Special

WASHINGTON, June 5.

ANNUALLY the sealers of weights and measures of states and municipalities gather at the Bureau of Standards to discuss experiences and make suggestions as to how they may accomplish the discomfiture of the giver of short weight or measure. In other years the careless dispenser of gasoline and other petroleum products has held a considerable place. This year, in the conference, May 25 to 28, attention was given to his kind but the word, broadly speaking, was that the oil companies were just as anxious to have that sort weeded out of the business as any sealer of weights and measures, or user of gasoline products.

"We rarely have a report of short delivery," said Thomas Flaherty, sealer of weights and measures in San Francisco, after he had reviewed the gasoline delivery situation since 1921. In that year, when he took charge of his office he said reports of short deliveries of gasoline indicated a deplorable condition. Before starting to clean the city of crooked and careless dispensers, he said, he called the oil companies to his office and laid reports about short deliveries before them suggesting that unless conditions were improved his office would ask for the imposition of the severest penalties and much publicity. The oil companies, he said, expressed surprise and regret, and promised hearty co-operation. That talk was followed by a check-up which seemingly had the desired effect.

Finds Little Deception

"MY greatest surprise and pleasure was in finding after many months of rigid investigation so little deception was practiced in gasoline deliveries, and now, although our vigilance has not slackened, we rarely have a report of short delivery."

Mr. Flaherty however, had an unusual experience. One of the newspapers sent out a reporter to buy gasoline and he wrote stories about getting short deliveries. Flaherty and his office checked up on the reporter and found that he really had no way of making tests. They made him admit that he had not made any tests that would stand up even on a superficial examination. The newspaper was big enough to stop the campaign and admit it believed that out of several hundred stations serving gasoline in San Francisco it would be extremely difficult to find one intentionally giving short measure.

Theodore A. Seraphin district supervisor, bureau of weights and measures, Philadelphia, read a paper on the use of built-in false tanks for checking gasoline deliveries. He said that short deliveries growing out of the desire to cheat could find ways to do so and that it was the problem of the sealer to find apparatus to expose the operator's or dealer's dishonesty so that he might be made to feel the sting of the law. To show what Philadelphia had done he described the decoy tanks used on automobiles sent out to catch the dishonest one.

Philadelphia's Method

THE practice there is to make a try-out purchase to determine whether the shortage is due to intention or failure of the pump to function properly. The first inspector buys to determine whether there is anything wrong with any of the facilities and to make an inspection of the whole place where there has been an allegation of short delivery, or there is reason for suspecting such work. He said that nearly half of the complaints were caused by motorists having too much confidence in the accuracy of tank gauges or rules.

"In our endeavor to stamp out persistent cheating," Mr. Seraphin said, "the oil companies have co-operated wholeheartedly, even to the extent of refusing to sell the offenders gasoline."

Charles M. Fuller, county sealer of weights and measures, Los Angeles, described the work of his department in the inspection of large meters used in the measurement and sale of petroleum products, the tests now being made with a test buggy of 50 gallons capacity, the capacity reading being at the center of a high pipe-neck equipped with gauge glass and calibrated gauge.

At the time of the first inspection he said, many inaccuracies were found, in some cases as high as 5 per cent, due in part to poor installations; to the fact that meters for the measurement of petroleum products were in more or less experimental stages and had not reached the accuracy and efficiency to to-day; to the use of large meters for small rates of dilivery which would allow some of the liquid to by-pass without registering, and in other cases small meters were being crowded beyond the safety point in an effort to make them do work for which they were not intended. Things, however, have changed by reason of better installations and the perfecting of meters. In addition to the 50-gallon test buggy the department has a vehicle tank wagon which has been carefully gauged.

Eliminate Crooked Dealer

M. A. BRIDGE reviewed work at Columbus, O. The first inspection of gasoline stations, 24 in number, brought to light 19 shortages, one was correct and four stations were giving more than proper measure. At the rate

at which misdeliveries were being made then, the annual loss to buyers, with gasoline selling at 23 cents, was calculated at $200,000 a year. He said that an inspection every three or four months would serve to keep the crooked straight or the elimination of such because the interest of the supplying companies would not permit selling to a persistently crooked retailer.

Howard R. Estes, sealer at Flint, Mich., discussed glass vending apparatus and advocated care on the part of inspectors to see they were made in such a way of clear glass as to assure the buyer of obtaining the quantity for which he was paying.

Shreveport-El Dorado Line to Pay Dividends

Staff Special

SHREVEPORT, June 5.—Stock of the Shreveport-El Dorado Pipe Line Co. was placed on a dividend paying basis at a meeting of directors May 24. First payment will be made on July 1 on the basis of 25 cents quarterly. This is 4 per cent on the $25 stock.

The company was organized in 1921 by J. B. Atkins, who since died. At the time of organization bonds totaling $1,250,000 were sold and $2,250,000 in bonus stock was issued to bond buyers. The company has built and operated 160 miles of line of which 120 miles is 6 and 8 inch connecting Shreveport with the El Dorado, Smackover, Homer, Louan and Lisbon fields. Since the lines were completed the company has transported over 30,000,000 barrels of oil.

At the recent meeting of the board K. E. Merren, a Shreveport producer, was elected president to succeed J. B. Atkins, Jr.

TULSA.—H. J. Williams, president and W. L. Walker, treasurer, of the Mid-Continent Konset Co., have returned to Tulsa headquarters after a business trip to Memphis, where they visited the Sullivan Co., manufacturers of Konset. Konset is a chemical used for accelerating the setting of cement, and acts also as a hardening and waterproofing agent. It is widely used in the oil industry and was recently named by the Mexican government as the only chemical reagent authorized for use in cementing wells, under the inspection laws of that country.

The Mid-Continent Konset Co. distributes the Sullivan Co. products in Oklahoma, Kansas, New Mexico, and Colorado. Albert Rainey, who was successful in demonstrating the benefits of using Konset to the Mexican authorities, is engineer for the company, and also makes his headquarters in Tulsa. Mr. Williams, the president, formerly was an attorney for Skelly Oil Co. and after that was with the Charles F. Noble Oil & Gas Co.

Gasoline And Other Motor Fuels

by Ellis and Meigs, is a book which gives a complete survey of the field and a description of practically every process of prominence.

The price of the book is $10. Just send us your check and we will mail a copy of it to you.

NATIONAL PETROLEUM NEWS

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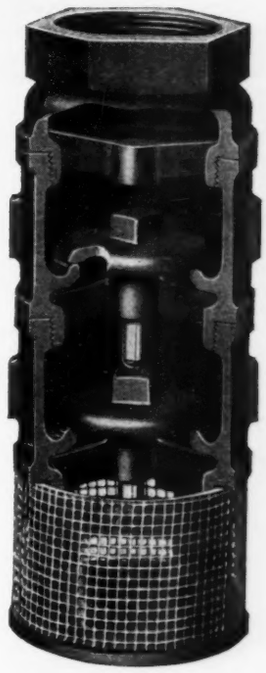

No. 439
Double Poppet
Foot Valve

THE following letter from the Rochester Pump Service, Rochester, N. Y., is typical of the experiences thousands of users are having with Buckeye foot valves:

"We believe you will be interested to know of our experience with your Buckeye Foot Valves. We are a 'pump service' organization, giving service on all makes of gasoline pumps to the various oil companies in our territory.

"In our work it has been necessary for us to take out a good many foot valves of different makes. As you know, for the past two years we have used your foot valves exclusively and while we have installed a lot of them, we are glad to say that we have never had to remove a Buckeye foot valve. *"We have found them dependable—always."*

Use the coupon below to get complete information regarding the various kinds of Buckeye Service Station Equipment.

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356 E. Third St. Dayton, Ohio
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PROFIT
What Is It?

Does it mean merely buying oil at one price and selling it at another? Supplying those who patronize you because they happen to, or because they think you are a fine fellow?

Profit is one of the most interesting and intriguing words in the English language, and to capitalize it you must sell not only yourself and your service, but some real, understandable reasons why the oil you handle gives the best service.

Jobbers handling Humble Oils know all of the reasons why people should buy their oils instead of other brands. They *believe* in these reasons themselves, many of them having been developed through experience. Consequently, their businesses are outstanding and profitable.

The Humble Oil & Refining Company operates no filling stations. Humble Products are sold at wholesale only. We can take care of your requirements in any quantity—in lithographed packages, drums, a carload or a cargo. We control every step in production and manufacture—from the wells to you.

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Producers - Pipe Lines
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"Zero Cold Test Oils"

HUMBLE OIL & REFINING CO.
HUMBLE OILS
HOUSTON, TEXAS

Here & There

National Petroleum News

I. H. Bayle

CINCINNATI, O.—Appointment of J. H. Bayle as manager of the newly-opened New Orleans, La., offices of the Davis Welding & Mfg. Co., Cincinnati, manufacturer of truck and storage tanks, has been announced. The story concerning the opening of this office was published in the May 12 issue, page 104.

* * *

T. E. Minshall, president of The Pocahontas Oil Co., Cleveland, O., has just returned from a three months' tour of Europe, Egypt and Africa. Mr. Minshall stated upon his return that "he would starve if he were in the gasoline business in Egypt," according to D. S. Campbell, vice president and treasurer.

* * *

N. F. Squire, who was formerly salesman of The Pocahontas Oil Co., Cleveland, O., and handled duties of sales manager as well, has now been appointed general sales manager. He is making a few changes in methods at service stations in an effort to improve service.

* * *

W. W. Ford, formerly with R. J. Brown Petroleum Co., St. Louis, Mo., is now special representative at Charlotte, N. C., for the Stoll Oil Refining Co., Louisville, Ky., according to William A. Stoll, treasurer.

* * *

W. W. Gerken has recently been promoted to manager of the New Rochelle, N. Y., distributing station of the Pure Oil Co., Columbus, O.

R. M. Ward, formerly lubricating sales promoter in the Mankato, Minn., division, for the Standard Oil Co. of Indiana, Chicago, resigned recently to become salesman in Wisconsin for the Skelly Oil Co., Tulsa. Mr. Ward has served with the Standard for the past eight years, first as salesman, and for the past two years as lubricating sales promoter.

Mr. Ward returned the middle of May from a 10-day trip to the Skelly refinery at Eldorado, Kan., where he attended the school of refinery practice. He began his new duties as salesman after June 1.

* * *

Col. W. E. Hutton, of Cincinnati, O., who has been first vice president of the Pure Oil Co., Columbus, O., since its predecessor, The Ohio Cities Gas Co., was organized, returned recently from a six months' cruise around the world. Col. Hutton, who is 81 years old, is a veteran broker of Cincinnati. He boasts of the record of not having a minute's illness on the entire trip, according to Charles A. Wood, editor of "The Pure Oil News," the company's official house organ.

* * *

Mollie Fisher, Cashier of National Petroleum Marketers' Association, the girl that takes the money when oil men register at national conventions, is to be married to Paul B. Blum, a Chicago restauranteur, on June 8. Mollie's services and personality have been so valuable to the organization where she works that L. V. Nicholas, president of the association, has prevailed on her to continue in charge of the treasury for a year at least.

* * *

H. M. Skrable, who has been in the sales department of the Associated Oil Co., San Francisco, for the past 11 years, plans to open a distributing plant soon at Santa Maria, Calif., handling Calpet gasoline and Ventura motor oil, products of the California Petroleum Corp. and Ventura Refining Co., Los Angeles, respectively.

* * *

Hobart Scott, of The Iron Mountain Oil Co., Tulsa, who has been attending the annual meeting of the Natural Gas Association of America, and making a trip through the Mid-Continent area, returned to his headquarters at St. Marys, O., recently.

* * *

Joseph Riesenman, Sr., president of the Newburg Gas & Oil Co., Cleveland, O., and Mrs. Riesenman, celebrated their golden wedding recently, in company with their 10 children, at Franklin, Pa.

New Oil Station Construction

National Petroleum News

Beaver, Pa.—Sutton Gasoline Co., Monaca, Pa., is building filling station. Station will be equipped with six pumps and lubricating service. Earl Tisdale, formerly truck driver for the company, will be manager of the station.

* * *

Milbank, S. D.—Milbank Community Oil Co. is erecting service station here, and installing bulk storage tanks. Pure Oil Co.'s products will be handled exclusively.

* * *

Bellefontaine, O.—Carl Alexander and Earl Parker, operating as the A. & P. Co., are erecting filling station at Rush Ave. and Main St.

* * *

Ottumwa, Ia.—George A. Hill will erect service station. William Moses is seeking permit to build filling station.

* * *

Onawa, Ia.—E. P. Myrland and L. C. Aibright completing service station, and will handle Texaco gasoline.

* * *

De Graff, O.—E. V. Notestine, formerly with the De Graff Oil Products Co., will build filling station.

* * *

Little Falls, Minn.—White Eagle Oil & Refining Co., Kansas City, Mo., will build filling station here.

* * *

Brownsboro, Tex.—Craft Bros., Smith county, will build filling station in the early summer.

* * *

Logan, O.—Mr. Harden, proprietor of the Harden Garage, will build filling station.

* * *

Waterville, Kan.—Home Gasoline & Oil Co. purchased property for filling station.

* * *

Lincoln, Neb.—National Refining Co., Cleveland, O., will build filling stations here.

* * *

Clarkesville, Ark.—Continental Oil Co., Denver, is erecting filling station here.

* * *

Faribault, Minn.—Standard Oil Co. of Indiana is erecting service station.

* * *

Fond-du-Lac, Wis.—W. E. Pierce will build filling station, costing $250.

* * *

Elbow Lake, Minn.—Barrett Oil Co. is completing filling station.

* * *

Del Rio, Tex.—The Texas Co. is completing filling station.

* * *

Thurston, Neb.—Ray Hill erecting filling station.

Owego, N. Y.—The Owego Oil Co. Inc., newly-organized company, plans to build five filling stations at Owego. The company took over the building recently occupied by Walter Myers' Square Deal Garage. Officers are: Fred Ford, John T. Gorman, Dr. George M. Decker, Arthur B. Stiles, all of Owego, and Arch B. Hover and John Marshall of Binghamton.

* * *

Rochester, Minn.—Rochester Oil Co., which is now completing a filling station here, will build another immediately. Standard Oil Co. of Indiana is building another station here.

* * *

Leavenworth, Kan.—Marland Refining Co., Ponca City, Okla., purchased property for two filling stations.

* * *

Oswego, N. Y.—Otis-Sawyer Boiler & Foundry Co. is building boiler shop, foundry and filling station.

* * *

Picher, Okla.—Standard Oil Co. of Indiana is erecting warehouse and office building here.

* * *

Onawa, Ia.—White Eagle Oil & Refining Co., Kansas City, Mo., will build filling station.

* * *

West Point, Neb.—Nicholas Oil Co. and Otto Schwinck plan to build filling station here.

* * *

Oswego, N. Y.—Standard Oil Co. of New York is completing filling station here.

* * *

Mound Valley, Kan.—Filling station is being erected here for I. M. Hinds.

* * *

Marietta, O.—Pure Oil Co., Columbus, O., will build bulk station here.

* * *

Syracuse, Kan.—Misch & Winters leased property for filling station.

* * *

Little Falls, Minn.—Home Oil Co. will erect another service station.

* * *

New Lisbon, Wis.—Standard Oil Co. of Indiana to build bulk station.

* * *

Deadwood, S. D.—Puritan Oil Co. to build bulk and filling station.

* * *

Little Falls, Minn.—Home Oil Co. is building filling station here.

* * *

Carroll, Neb.—Dan Thomas plans to build filling station.

* * *

Alice, Tex.—James Gibson is building filling station.

Speerfish, S. D.—Otto Behrens, of Kimball, S. D., is building filling station. Mr. Behrens owns a filling station at Kimball and operates the bulk storage plant of the White Eagle Oil & Refining Co. there.

* * *

Mahnomen, Minn.—Home Oil Co., Fargo, plans to build filling station here. Deep Rock gasoline will be handled. The company is also building filling station at Hawley, and other points in northern Minnesota.

* * *

Tracy, Minn.—Tri-County Cooperative Oil Co. building service station. A bulk station has just been completed here for the company.

* * *

Springfield, Mo.—D. M. Oberman Mfg. Co. will erect filling station in connection with its new factory building.

* * *

Barrett, Minn.—Alfred Peterson is erecting service station and Pure Oil products will be handled.

* * *

Newark, N. Y.—Standard Oil Co. of New York is building three service stations here.

* * *

Morrillton, Ark.—Continental Oil Co., Denver, gets option on property for bulk station.

* * *

Prairie du Chien, Wis.—Prairie Petroleum Co. is building service station.

* * *

New Britain, Conn.—Joseph Alex will build service station, at 281 Road St.

* * *

Sutton, Neb.—Standard Oil Co. of Nebraska is building service station.

* * *

Brownsboro, Tex.—Filling station for I. T. Fulgham is being completed.

* * *

Moorehead, Minn.—The Texas Co. is completing filling station here.

* * *

Fergus Falls, Minn.—The Mills Oil Co. is completing filling station.

* * *

Freeport, Minn.—B. G. Meyers & Co. is erecting bulk station here.

* * *

Red Wing, Minn.—Kingston Oil Co. completing filling station.

* * *

Carthage, Mo.—Mrs. G. W. Koontz will erect filling station.

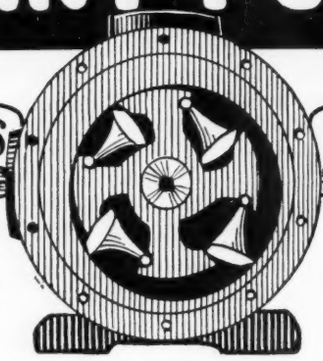
* * *

Weimar, Tex.—Oswald Duerr is building filling station.

* * *

Anoka, Minn.—Ward Oil Co. building filling station.

BLACKMER ROTARY PUMPS



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1505 Commerce Bldg., Kansas City, Mo.
Stearns-Rogers Mfg. Co., Denver, Colo.
1320 Starks Bldg., Louisville, Ky.
429 Broadway, Milwaukee, Wis.
1103 Plymouth Bldg., Minneapolis, Minn.
306 Wells Fargo Bldg., New Orleans, La.
71 Murray St., New York, N. Y.
904 Real Estate Trust Bldg., Philadelphia, Pa.
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Jobbers and Car Load Buyers!

We Have the Kind of Motor Oils You Want.
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We Give You Value Received
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MATCH ANY OIL

Order in Assorted Cars { In Drums / In Tank Cars

From the OLDEST Pennsylvania Refiners

A. D. MILLER SONS' CO., Pittsburgh, Penna.

Industrial Catalogues

Moreland Motor Truck Co., Los Angeles, Calif.—Leaflets and advertising material on its six-wheel, dual drive 10-ton truck, which include the comparison of the advantages of the Moreland six-wheel truck with the four-wheel truck, have recently been put out by the company. Construction features are described and the advantages of this type of truck are summarized in one of he leaflets as follows: reduced load on each wheel causing lower static and lower subsoil pressure; reduced unsprung weight and impact forces; reduced tendency to wheel spinning and to skidding on account of four-wheel brakes and greater safety under all conditions; and increased economy in freight transportation and a smaller number of trucks on the road to carry the same amount of tonnage. The 10-ton truck does the work of two five-ton trucks with one driver at the operating cost of one truck. The company also states that on account of the lower dead-weight required to transport a given amount, gasoline and oil consumption have been shown to be 44 per cent less than with four-wheel trucks.

* * *

The States Engineering Co., Baltimore, Md.—The Senco oil gauger, which is designed to replace the old-fashioned method of gauging tanks, is described and illustrated in a booklet recently published. The principal features of this gauger is its metal wipers at the end of the aluminum housing in which the tape is encased, which wipes off the oil as the tape is wound up. Some of the features of the gauger are accuracy, economy because of no breakages and tape replacements, speed, and safety because there is no chance for metal to strike and cause sparks. Cost is $18.75.

* * *

Dean Hill Pump Co., Anderson, Ind.—Bulletins 203 and 1501 describing horizontal single suction centrifugal pumps and reciprocating deep well pump heads respectively, have been published. Construction features of the pumps are described and illustrated by drawings, and tables of dimensions are included.

Specifications, tables of dimensions and maximum capacities of deep well pumping heads are given in the description of the pump heads.

* * *

Crouse-Hinds Co., Syracuse, N. Y.—Various types and sizes of condulets for grounding service wire and conduit system are described and illustrated in folder No. 39. A new service entrance condulet, known as type F, form 6, without screw holes through the cover, has been added to the line and is described fully in bulletin 2075.

Bulletin 2089 is the latest one covering its type of condulet for grounding service wire

Oil Figures Soon To Be Stated in Barrels

WASHINGTON, June 3.—Within three months at least, all quantities of refined petroleum products will be stated by the Bureau of Mines in barrels instead of gallons. The bureau has canvassed refiners as to the change and has found 700 for to 175 against such a change. All back figures of the bureau will be changed from gallons to barrels so as to avoid as much confusion as possible. The 42-gallon barrel will be used.

The main objection to the change was that the value of past figures and graphs would be seriously impaired. As part answer to that the bureau has decided to change its old figures, whenever used, so as to state them in barrels. Those who have mechanical computation facilities, it is believed, will not find it hard to state the figures either in gallons or barrels.

British statisticians, for many years, have been cutting down on the number of ciphers to the right of the really significant figures by stating quantities in tons, whenever possible. The countries using the metric system, for many years, have stated petroleum products in metric tons, which is not convenient for "Saxondom," but they have thought of their own convenience rather than that of outsiders.

Petrol Breaks British General Strike

CLEVELAND, June 4.—Just as petroleum was one of the biggest factors in winning the world war, petroleum is credited with breaking the general strike in Great Britain and probably saving that country from communism. The Investors' Chronicle, one of the great English financial publications, had this to say after the collapse of the strike:

"Many acute thinkers believe that if the vital national services, and, above all, the distribution of foodstuffs were paralysed for a few days, the great urban centres would swiftly collapse, and the government be forced to capitulate on the best terms it could obtain.

"The very suddenness of the blow was to bring success. Once give constituted authority time to improvise, and the game would be up: we all saw that. What was not so clear to many was the ability of the government to improvise rapidly. Petrol really saved us: road transport served until the railways could be got going."

NORTH WILKESBORO, N. C.—Floyd C. Forester is installing a 24,000 gallon storage tank for petroleum products.

Chemists and Engineers

The revised tenth edition of OIL ANALYSIS by A. H. Gill, is ready for you. It has added a section on the examination of motor gasoline and a description of the latest model Mac-Michael Absolute Viscosimeter, and has been brought thoroughly down to date.

The price is still $2.50. Send us your check and let us mail a copy of it to you:

NATIONAL PETROLEUM NEWS
808 Caxton Building Cleveland, Ohio

BALCRANK TYPE "D" **High Pressure Lubricator**

Greases All Cars

Quicker *Cheaper*

Quicker—because always ready; high pressure lubricates thoroughly with one shot; easily moved from car to car; instantly adaptable to different systems.

Cheaper — because quicker, and one man does the work of two; one step on the pedal generates high pressure—no other force required; no time lost for adjusting.

Seven Points of BALCRANK Superiority

1. Foot pressure—one man operates—less fatiguing.
2. Positive pressure — uses any grade of automotive grease—not affected by climate.
3. Adaptors for all popular lubricating systems—100% service —unrestricted profits.
4. One universal and three swivel joints allow working in close places and prolong the life of the hose.
5. Measures the amount of grease used and remaining in gun.
6. Easily moved from place to place.
7. Self contained. No compressed air or electricity required.

The Balcrank High Pressure Lubricator will help you change an expensive service into a very profitable business. The coupon will bring you more information about this lubricator.

The Cincinnati Ball Crank Co.
Cincinnati, Ohio

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4800 North St., Cincinnati, Ohio

Please send me complete literature on your new Type "D" High Pressure Lubricator.

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City and State _____

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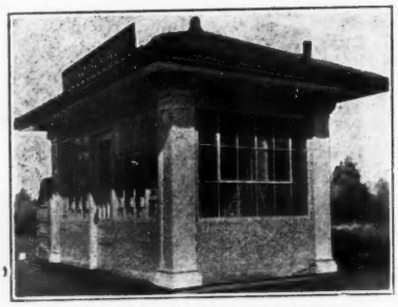

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Architects and Manufacturers
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OUR FIFTY-FIVE YEARS of success is the result of continuously producing a complete line of HIGH QUALITY Lubricants combined with excellent service and special attention to each individual jobber's requirements.

The following specialties are particularly interesting to the jobber at this time:

TRADE MARK
REG. U.S. PAT. OFF.
FISKE'S

GEAR AND TRANSMISSION LUBRICANT
(the all year lubricant used summer or winter)

PRESSURE LUBRICANT
Cutting Compounds, Drawing Compounds
Cup, Fibre and Graphite Greases in all qualities and consistencies.

TWO LARGE PLANTS FOR YOUR CONVENIENCE, NEWARK, NEW JERSEY AND TOLEDO, OHIO.

FISKE BROTHERS REFINING CO.

GENERAL OFFICES: 24 State Street, New York, N. Y.

Newark, N. J. Toledo, Ohio Chicago, Ill.

Properties of Southern Oil Corp. Are Sold

TULSA, June 3.—Properties of the bankrupt Southern Oil Corp. were sold at Sapulpa, Okla., at a receiver's sale on May 26. The assets of the corporation brought $319,275.

The North American Car Co. paid $50,000 for 68 tank cars. The Yale refinery brought $50,000 from a Kansas City iron company and the Walters refinery $10,000. Oil lines in southern Oklahoma and in the vicinity of the Cushing refinery were bought for $168,000 by the Taubman Pipe & Supply Co.

The Southern Oil Corp. formerly was capitalized at $3,000,000. Its refinery at Cushing had a capacity of 6,500 barrels per day and the Walters plant 1500 barrels per day. It is understood that the plants will be junked by the purchasers.

Offers Ethyl Gas in Four States

CLEVELAND, June 4.—The Spears & Riddle Co., Wheeling, W. Va., announces that it has obtained from the Ethyl Gasoline Corp., 25 Broadway, New York, selling rights for Ethyl gasoline in West Virginia, Pennsylvania, Delaware and Texas.

The company is offering franchises for the sale of the fuel, which it puts out under the name of Fleetwing Ethyl Gasoline, to jobbers in the states mentioned.

The Gulf Refining Co. formerly held the franchise for the sale of Ethyl gasoline in Pennsylvania but during the time that its sale was suspended, pending the investigation of the hazard it involved, the Gulf brought out its own anti-knock fuel, NoNox which it is now marketing in Pennsylvania.

Three Jenkins Units Going In

CHICAGO, June 3.—Graver Corp., East Chicago, Ind., holding the manufacturing and sales rights on the Jenkins cracking process have reported the sale of three new units. White Eagle Oil & Refining Co., Kansas City, Mo., will soon install a 1000-barrel unit at its Casper, Wyo., plant; Peerless Oil & Refining Co., Chanute, Kan., is about to install its second 1000-barrel unit at the Chanute refinery, and the Kanotex Refining Co., Arkansas City, Kan., has its second 1000-barrel unit under construction at the present time.

Trager Leaving Marland

PONKA CITY, OKLA., June 4.—Earl A. Trager, geologist, who has been in charge of geological research work for the Marland companies here, is leaving that organization, and after July 1 will be connected with the new engineering company being organized by Earl Oliver.

ON THE LAZY BENCH

National Petroleum News

The Christening

An Italian was going to have one of his boys christened, but he faced a problem.

"Will you pleesa nama my babe same as I give ya?"

"Tony, why do you make such a request?" asked the priest.

"Wella, ya see—its lika dis. My first boy I tells ya I wanta heem nama 'Tom,' and ya christened heem 'Thomass.' Now, I wanta his name 'Jack' and no wanta heem name 'Jackass.' "

—Ohio Gas & Oil Men's Journal

◈ ◈ ◈

Try This on Your Victrola

We'll bet our sales would double
To the girls who drive their cars
If "Pure" would put up Tiolene
In fancy cold cream jars,
Perfumerize the Purol
And on Stations hang a sign—
Bargain Sale of Pure Oil Products
For a Dollar Ninety-nine!

—Pure Oil News

◈ ◈ ◈

A Pertinent Question

The little girl returned from church deeply musing on the sermon, in which the preacher had declared that animals, lacking souls, could not go to heaven. As the result of her meditation, she presented a problem to the family at the dinner table, when she asked earnestly:

"If cats don't go to heaven, where do the angels get strings for their harps?"

—Pure Oil News

◈ ◈ ◈

Would Have Been News, Had It Happened

Mr. and Mrs. Henry Spencer had as their guest for chicken dinner recently or we mean, was going to have. Oh, well as long as it didn't happen we need not give the gentleman's name.

—Trico News

◈ ◈ ◈

As the Printer Saw It

"See here," said the angry visitor to the reporter, "what do you mean by inserting the derisive expression 'Applesauce' in parentheses in my speech?"

"'Applesauce'? Great Scott, man, I wrote 'Applause.'"

—Pure Oil News

Some Difference

Two fellows were discussing evolution. One of them said: "I'm one of those liberal thinkers like Clarence Darrow. It doesn't make any difference to me whether or not my grandfather was a monkey."

The other fellow said: "Well, maybe it doesn't make any difference to you if your grandfather was a monkey, but you'll have to admit it makes a whole lot of difference to your grandmother."

—Pure Oil News

◈ ◈ ◈

Oh Death, Where Is Thy Sting?

Roaming aimlessly through a cornfield less than three miles from his farm house, Henry Wrede, 72 years old, wealthy farmer near Lafayette, Minn., was rescued by a searching party after he had spent three days trying to find his way back to the farm house. Mr. Wrede lost his glasses while climbing through a fence and being very near sighted, was unable to distinguish objects more than a few feet distant. He was forced to eat green corn for food.

—Trico News

◈ ◈ ◈

A Good Lusty State

Ohio's extreme length is 230 miles. Its extreme breath is 205 miles.

—Ohio Gas and Oil Men's Journal

◈ ◈ ◈

Any Kind of Cheese for Bait, But Make It Snappy

Not long ago a woman entered a five and ten-cent store and addressed the clerk as follows: "Give me one of those five-cent mouse traps, please and hurry up, I want to catch a train."

—Marion Line.

◈ ◈ ◈

Driller (to contractor): "It took six days to make this earth, you can't expect me to drill a hole through it in one."

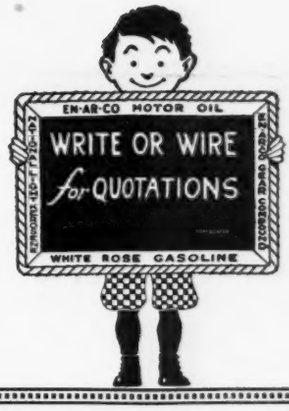
—Bridgeport Driller.

A dumb bell sure,
Is Mary Ann Dunn,
She thinks a calf wheel
Is a bull wheel's son.

—Bridgeport Driller

◈ ◈ ◈

We drilled him up and bailed him out,
That toolie, Henry Cole,
He held a chisel for "Cock Eyed" Jones
And he knocked him down the hole.

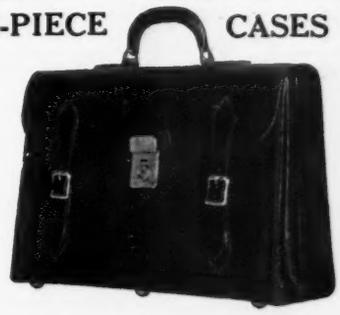


The
NATIONAL REFINING COMPANY
PETROLEUM PRODUCTS

THREE MODERN REFINERIES:
Marietta, Ohio Refinery
operated on Pennsylvania Crude
Findlay, Ohio Refinery
operated on Ohio Crude
Coffeyville, Kansas Refinery
operated on Midcontinent Crude

National Headquarters
NATIONAL BLDG., CLEVELAND, O.

2-PIECE CASES



303 Folio and inner Case, Only $16.50

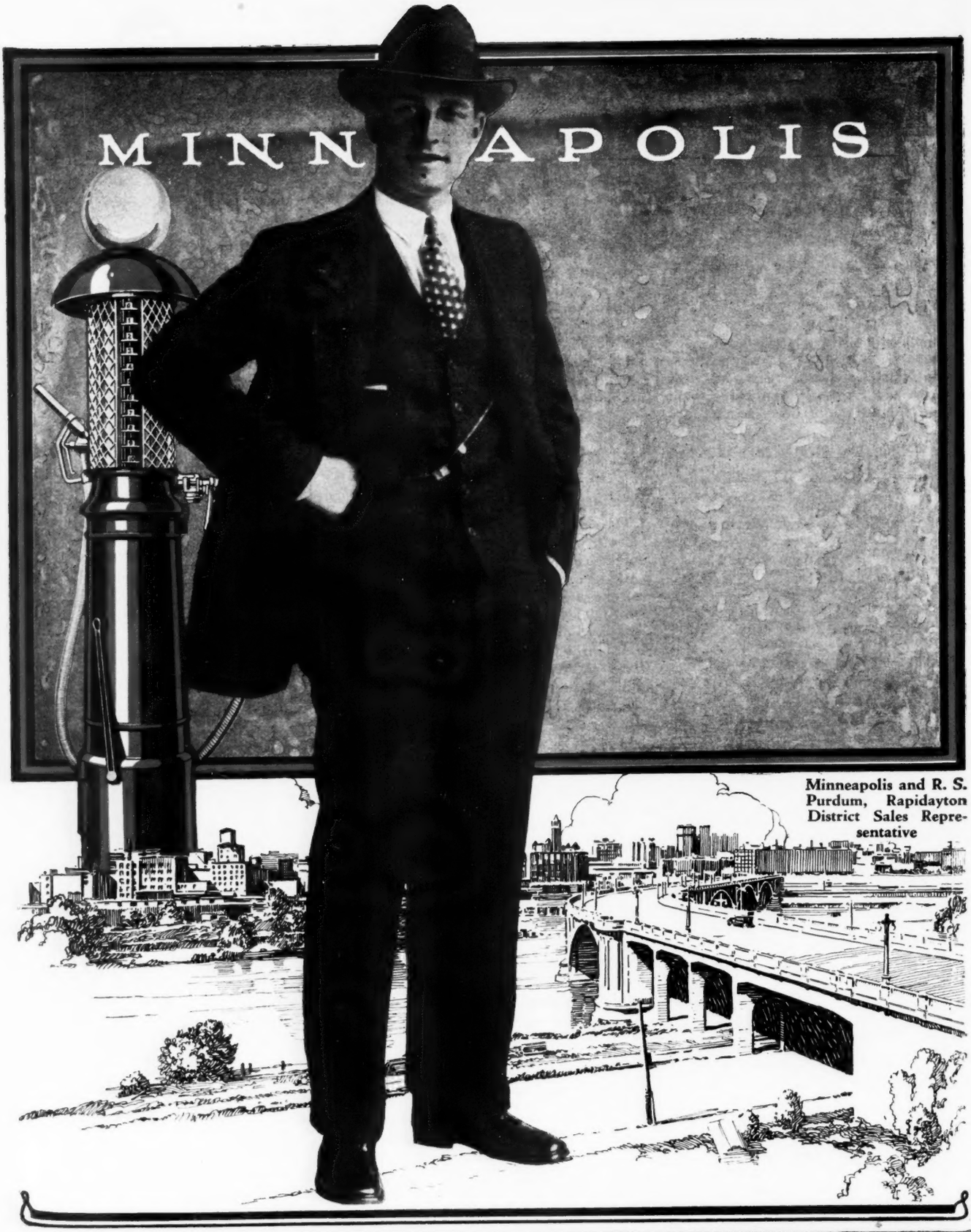
Less 10% for cash

Made from heavy black cowhide with stiffened bottom, reinforced with metal studs. Extension lock and strong, comfortable handle. There are 3 roomy pockets for stationery and Inner Case, which has a handle and may be carried separately. It is velvet lined with compartment containing 9 four oz. bottles and 4 one half oz. jars. Your name embossed in gold *free*. Satisfaction guaranteed or your money returned.

Other Styles in our FREE Catalog

L-U-C-E

Builders of Sales Luggage
614 Delaware KANSAS CITY, MO.



Minneapolis and R. S. Purdum, Rapidayton District Sales Representative

Rapidayton

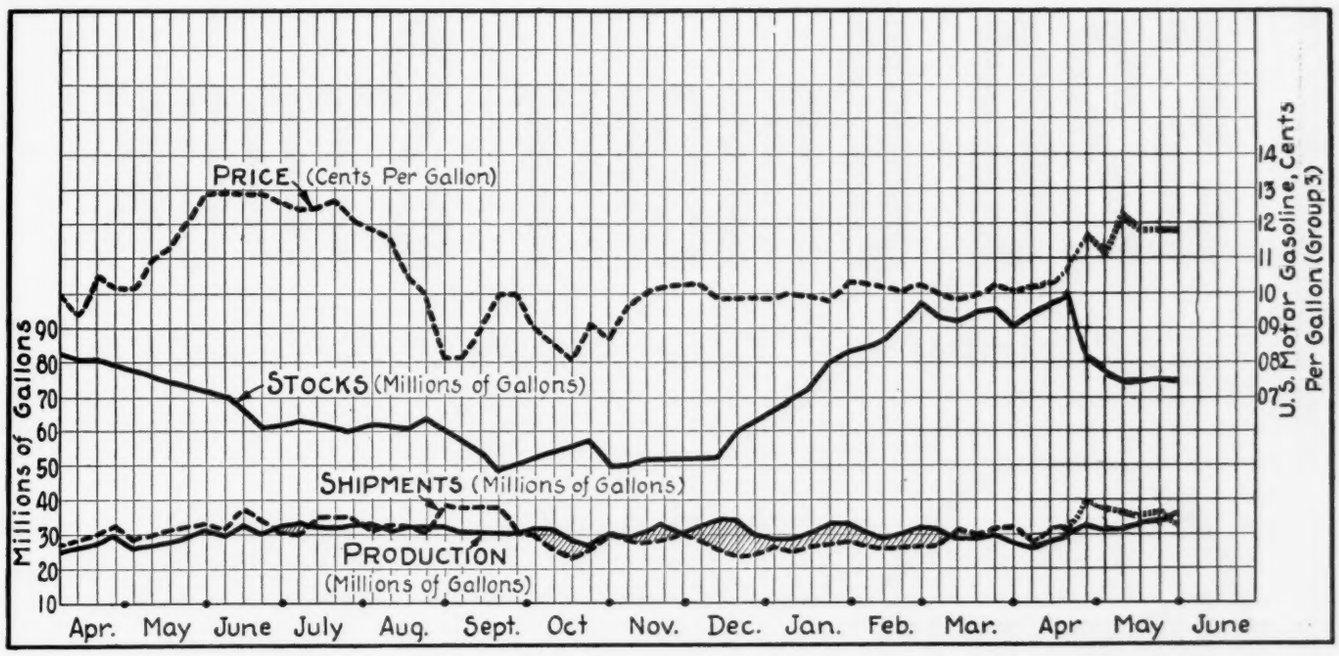
TRADE MARK REG. U. S. PAT. OFF.

Refinery - Tank Wagon Markets

National Petroleum News

Barometer of the Mid-Continent Gasoline Markets Week Ending June 4

(Figures on Stocks, Shipments and Production taken from National Petroleum News weekly compilation of Mid-Continent Refinery Operations.)



(Shaded area above represents additions to stocks)

Export Gasoline Price Cut Disturbs Mid-Continent

Staff Special

Tulsa, June 5

THE Mid-Continent gasoline refinery market remained quiet and steady throughout the first week in June. The active jobber buying expected by refiners did not appear, but the reasonably steady inflow of orders was sufficient to keep the majority from becoming more than temporarily pessimistic.

Natural gasolines were cheaper; kerosene prices slipped more than a cent; gas oil and distillates held their own, and fuel oils were fairly firm despite the slow movement.

While the market finished the week steady, there is much speculation as to what the remainder of June holds for refiners especially since the Standard Oil Co. of New Jersey today reduced their posted price for export gasoline bought on contract at the Gulf ¾ cent per gallon. This reduction gives north Texas refiners 12.15 cents per gallon f.o.b. refineries for their 64-66, 375 end point material and Oklahoma refiners 12.05 cents. This is only slightly higher than spot 58-60 U. S. Motor gasoline.

Consensus today was that the export gasoline already in storage at plants would either be thrown on the spot market in competition with U. S. Motor gasoline, or blended with lower gravity gasolines and offered in competition in that form.

Many of the north Texas refiners are expected to quit making higher gravity gasolines and to begin cutting U. S. Motor grade. This increased output will be offered on the open market, and will be in direct competition with Group 3 U. S. Motor gasoline moving into northern territory. If this situation develops, competition for domestic business will be much keener than it has been in recent months.

The export price reduction came as a surprise despite the fact that refiners have had considerable difficulty for several weeks in disposing of their goods. Thursday and Friday the Galena-Signal Oil Co., and the Simm Oil Co., buying for the account of the Galena-Signal, purchased 64-66 gasoline in north Texas at 12½ cents per gallon, almost ½ cent under the posted price at that time.

This buying did not relieve the situation noticeably. Many refiners felt the offer was too low and did not accept it. One refiner who did accept an order for 300,000 gallons, today declared he wished he had taken 3,000,000 gallons.

The new policy of The Texas Co. in abolishing quantity discount agreements has caused considerable discussion, and there also is speculation as to whether the recent advances by that company of 1 cent per gallon wasn't an attempt to get a premium for their new brand of motor fuel.

Several gasoline men have been expecting the Standard Oil Co. of Indiana to meet the advance in its territory. Others doubt that the Standard will take such a step unless other factors develop to warrant an advance.

Magnolia Loan Moved Up

THOSE who expect the advance, point to the action of the Magnolia Petroleum Co. in meeting the advance in Oklahoma, and of the Gulf Refining Co. and the Standard Oil Co. of Louisiana in meeting the increase in Arkansas, Louisiana and Tennessee.

The arguments on the other side are that The Texas Co. does not have sufficient gallonage in the Indiana territory to cause much concern and that if it does increase its business as rapidly as some reports would indicate, the

(Continued on Page 117)

Market Section

We Will Contract for a Few Cars

520 BRIGHT STOCK

TELEGRAPH AS OUR SUPPLY IS LIMITED

PENRECO

TRADE MARK

Blends Perfectly With Neutrals At Ordinary Summer Temperature, and Will Not Separate.

SPECIFICATIONS

Special Processed Dewaxed Triple Filtered

Viscosity @210—80/85

Flash—460

Cold Test—20-25

Fire—520

Gravity—27-28

Color—7

Guaranteed 100% PURE PENNSYLVANIA OIL

The highest grade oil in the world

If Interested Don't Write—*Wire*—As The Supply Is Limited. We Will Contract For A Few Cars.

AN IDEAL STOCK FOR BLENDING MOTOR OILS

A PERFECT TRUCK OR TRACTOR OIL

Supplied in Straight or Compartment Tank Cars, or Drums C-L

Pennsylvania Refining Company

KARNS CITY, PENNSYLVANIA

Refinery Markets on Light Oils and Lubricants

Pennsylvania, Oklahoma, North and South Texas, Louisiana, Arkansas, California

GASOLINE AND NAPHTHA

	Prices June 7	Prices June 1	Prices May 24
PENNSYLVANIA			
52-54 Naphtha	13¾–14	14 –14¼	13½–14
54-56 Naphtha	14¼–14½	14¼–14½	13¾–14¼
58-60 Gasoline	14½–14¾	14½–14¾	14½–15
60-62 Straight-run gasoline	15 –15½	15 –15½	13 –15½
64-66 Straight-run gasoline	15½–16	15½–16	15¼–15½
68-70 Straight-run gas. 350-360 E.P.	15¾–16½	16 –17	–16
68-70 Straight-run gas. 305-320 E.P.	19 –20	19 –20	–20
OKLAHOMA			
48-50 450 E. P. naphtha	11¼–11½	–11½	11½–11¾
50-52 450 E. P. naphtha	11¼–11½	–11½	11½–11¾
56-58 450 E. P. gasoline	11½–11⅝	–11½	11½–11¾
56-58 U. S. Motor gasoline	11⅝–11¾	11⅝–11¾	11⅝–11¾
58-60 450 E. P. gasoline	11⅝–11¾	11½–11¾	11⅝–11¾
58-60 U. S. Motor 437 E. P.	11¾–12	–12	11¾–12
60-62 400 E. P. gasoline	12 –12¼	12 –12¼	12⅛–12¾
64-66 390 E. P. gasoline	–12½	12½–12¾	12½–12¾
64-66 375 E. P. gasoline	†12½–12¾	12¾–13	12¾–13
68-70 350-360 E. P. gasoline	13 –13¼	13¼–13½	13¼–13½
64-66 437 E. P. blend	11½–11¾	11½–11¾	11½–11¾
KANSAS*			
58-60 U. S. Motor gasoline	12 –12¼	–12¼	12¼–12½
60-62 400 E. P. gasoline	–12½	–12¾	12¾–13
64-66 375 E. P. gasoline	13 –13¼	13 –13¼	13 –13¼
*F. O. B. refinery Kansas destination.			
NORTH TEXAS			
48-50 450 E. P. naphtha	11¼–11½	11¼–11½	11¼–11½
56-58 450 E. P. gasoline	11¾–11½	11¼–11½	–11½
58-60 450 E. P. gasoline	11½–11¾	11½–11¾	11½–11¾
56-58 U. S. Motor gasoline	–11¾	–11¾	–11¾
58-60 U. S. Motor gasoline	–12	12 –12⅛	11⅞–12⅛
64-66 390 E. P. gasoline	† –12¼	† –12¾	–12¾
64-66 375 E. P. gasoline	† –12½	†12¾–13	13 –13⅛
68-70 350-360 E. P. gasoline	13 –13¼	–13½	–13½
NORTH LOUISIANA			
58-60 U. S. Motor 437 E. P.	12¼–12⅜	12¼–12½	12¼–12½
ARKANSAS			
58-60 450 E. P. gasoline	12 –12¼	–12	12¼–12½
58-60 U. S. Motor gasoline	12¼–12½	12¼–12½	12½–12¾
64-66 375 E. P. gasoline	† –13	–13	13¼–13½
CALIFORNIA			
54-61 U. S. Motor gasoline	12½–13	12½–13	12½–13
42-45 Engine distillate, 445-480 E.P.	10 –10½	10 –10½	10 –10½

Note: This is without the 2-cent state tax included in the price of California refiners for shipments within the state.

NEW ENGLAND (F. O. B. Boston and Fall River)			
U. S. Motor gasoline	–14⅜	–14¼	.....

NATURAL GASOLINE

(Note: End point of all grades, not over 375° F.)

OKLAHOMA			
Grade Double A	9¾–10	10¼–10½	–10½
Grade A	9¾–10	10¼–10½	–10½
Grade Double B	9½– 9¾	10 –10¼	–10¼
Grade B	9½– 9¾	10 –10¼	–10¼
Grade C	9⅜– 9½	9¾–10	–10
NOTE—Specifications adopted by Ass'n. of Nat. Gaso. Manufacturers			
Grade Double A—80-87.9 gravity, 90% recovery, not over 375 E. P.			
Grade A—72-79.9 gravity, 90% recovery, not over 375 E. P.			
Grade Double B—84-92 gravity, 85% recovery, not over 375 E. P.			
Grade B—76-83.9 gravity, 85% recovery, not over 375 E. P.			
Grade C—80-90 gravity, 78% recovery, not over 375 E. P.			
NORTH LOUISIANA			
*Grade Double A	–10¾	–10¾	–11¼
*Grade Double B	–10½	–10½	–11
*Grade C	10¼–10½	–10½	10½–10¾
*F. O. B. Monroe District.			
NORTH TEXAS			
*Grade Double A	9¾–10	–10¼	10½–10⅝
*Grade A	9¾–10	–10¼	10½–10⅝
*Grade Double B	– 9⅝	10 –10⅜	–10¼
*Grade B	– 9⅜	10 –10⅜	–10¼
*Grade C	– 9½	9¾–10	–10
*F. O. B. Breckenridge.			
CALIFORNIA			
78-84° 375 E. P.	15½–16	15½–16	15½–16
PENNSYLVANIA			
68-70 Grav. 437 E. P.	14¾–15	14¾–15	14½–15
64-66 Grav. 437 E. P.	14¾–15	14¾–15	14½–15
60-62 Grav. 437 E. P.	14¾–15	14¾–15	14½–15
68-70 Grav. 420 E. P.	15 –15¼	15 –15¼	14¾–15¼

BURNING OILS

PENNSYLVANIA			
45 Water White Kerosene	12½–12¾	12¾–13	12½–13
46 Water White Kerosene	13 –13½	13 –13½	12¾–13
47 Water White Kerosene	13½–13¾	13½–13¾	13¼–13½
800 Burning Oil		– 8	.....
OKLAHOMA			
41-43 Water White Kerosene	9 – 9¼	9¾– 9⅞	10⅛–10⅜
42-44 Water White Kerosene	– 9¾	–10¼	–10½
KANSAS			
41-43 w. w. kerosene	10¼–10½	–10¾	–11
42-44 w. w. kerosene	10¾–11	–11¼	–11¼

†Quotations only, no sales recorded.

NORTH TEXAS	Prices June 7	Prices June 1	Prices May 24
41-43 Water White Kerosene	9¼– 9½	9¾– 9⅞	10 –10¼
NORTH LOUISIANA			
41-43 Water White Kerosene	–10	–10¼	10¼–10½
ARKANSAS			
41-43 Water White Kerosene	9¾–10	10¼–10½	10½–10¾
CALIFORNIA			
38-40 Water White Kerosene	7 – 8	7 – 8	7 – 8
NEW ENGLAND			
*40-43 Water White Kerosene		–11¼	.....

NEUTRAL OIL

PENNSYLVANIA (Viscosity at 70° F.)			
200 Vis. No. 3 Assoc. Filt	29 –30	29 –29½	28½–29½
180 Vis. No. 3 Assoc. Filt	27 –28	27 –27½	26½–27½
150 Vis. No. 3 Assoc. Filt	23 –25	22½–24	23 –25
(Non-Viscous)			
34 Grav. 350-360 Flash	7¾– 8½	7¾– 8½	7¾– 8¼
36 Miners Neutrals 300-305 Flash	7½– 7¾	7½– 7¾	7½– 7¾
OKLAHOMA (Viscosity at 100° F.)			
100 Vis. No. 2 color	6½– 7½	6½– 7½	6½– 7½
150 Vis. No. 3 color	9 –10	9 –10	9 –10
150 Vis. No. 4 color	9½– 9¾	9½– 9¾	9½– 9¾
180 Vis. No. 3 color	–10½	–10½	–10½
180 Vis. No. 4 color	9¾–10½	9½–10½	9½–10½
180 Vis. No. 5 color	9½–10¼	9½–10¼	9½–10¼
200 Vis. No. 3 color	–11½	–11½	–11½
200 Vis. No. 4 color	11¼–11½	11¼–11½	11¼–11½
200 Vis. No. 5 color	9¾–11¼	9½–11¼	9½–11¼
220 Vis. No. 3 color	12 –13	12 –13	12 –13
220 Vis. No. 4 color	13 –13¼	13 –13¼	13 –13¼
220 Vis. No. 5 color	12 –12¾	12 –12¾	12 –12¾
240 Vis. No. 3 color	14 –16	14 –16	14 –16
240 Vis. No. 4 color	14¼–14½	14¼–14½	14¼–14½
240 Vis. No. 5 color	–14	–14	–14
280 Vis. No. 3 color	16 –17	16 –17	16 –17
280 Vis. No. 4 color	16¼–16½	16¼–16½	16¼–16½
280 Vis. No. 5 color	15¾–16	15¾–16	15¾–16
300 Vis. No. 5-6 color	17 –18½	17 –18½	17 –18½
GULF COASTAL (Viscosity at 100° F; cold test 0)			
100 Vis. No. 2 Color Unfilt. Pale	8 – 8½	8 – 8½	8 – 8½
200 Vis. No. 3 Color Unfilt. Pale	12 –12½	12 –12½	12 –12½
300 Vis. No. 3 Color Unfilt. Pale	13½–14	13½–14	13½–14
500 Vis. No. 3½ Color Unfilt. Pale	15½–16	15½–16	15½–16
750 Vis. No. 4 Color Unfilt. Pale	19½–20½	19½–20½	19½–20½
200 Vis. No. 5½ Color Red Oil	10 –10½	10 –10½	10 –10½
300 Vis. No. 5½ Color Red Oil	12 –12½	12 –12½	12 –12½
500 Vis. No. 6 Color Red Oil	13½–14	13½–14	13½–14
750 Vis. No. 6 Color Red Oil	17½–18½	17½–18½	17½–18½
CALIFORNIA (Viscosity at 100° F.)			
100 Vis. No. 2 color	11 –11½	11 –11½	11 –11½
100 Vis. No. 3 color	8½– 9	8½– 9	8½– 9
200 Vis. No. 3 color	13½–14	13½–14	13½–14
300 Vis. No. 3 color	15 –15½	15 –15½	15 –15½
450 Vis. No. 3½ color	18 –18½	18 –18½	18 –18½
550 Vis. No. 3 color	20 –21	20 –21	20 –21
600 Vis. No. 3½ color	21 –22	21 –22	21 –22
100 Vis. No. 5 color	7 – 7½	7 – 7½	7 – 7½
200 Vis. No. 5 color	12 –12½	12 –12½	12 –12½
300 Vis. No. 5 color	13 –13½	13 –13½	13 –13½
400 Vis. No. 5 color	15 –16	15 –16	15 –16
500 Vis. No. 5 color	16 –17	16 –17	16 –17
600 Vis. No. 6 color	17 –18	17 –18	17 –18
700 Vis. No. 7 color	18 –19	18 –19	18 –19

CYLINDER STOCKS

OKLAHOMA			
190-200 Vis. at 210° Bright Stock	31 –35	31 –35	31 –35
150-160 Vis. at 210° Bright Stock	27 –31	27 –31	27 –31
600 E Stock, 140-150 Vis. — 210°	18 –20	18 –20	18 –20
600 Steam Refined Olive Green	8½–11	8½–11	8½–11
600 Steam Refined Dark Green	6½– 7	6½– 7	6½– 7
Black Oil	5 – 6	5 – 6	5 – 6
PENNSYLVANIA (1-inch Immersion Test)			
600 Steam Refined	14½–15½	14½–15½	14¾–16½
650 Steam Refined	20½–21	20½–21	20½–21
600 Flash	23½–24	23½–24	24 –24½
625 Flash	32½–33	–34	–34
600 Warren E	21 –21½	21 –21½	21 –21½
600 Oil City E	20 –20½	20 –20½	20 –20½
600 Fire D filtered		–26½	.....
Cold Test Stocks (bright filtered)	40 –41	40½–41	39 –40
Cold Test Stock (dark filtered)	–39	–39	37 –38

(Note—Prices of total immersion test goods average 1 to 3 cents per gallon higher.)

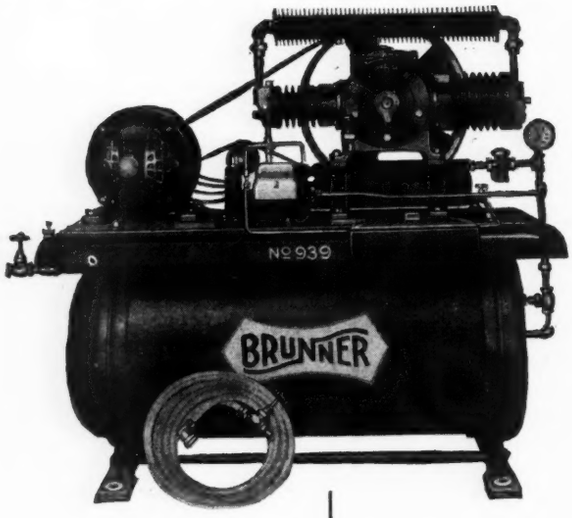
Above prices are f. o. b. refinery in tank car. They are the prices at which the bulk of the products on the open market move. Whoever has knowledge of any open market prices on any considerable quantity of goods differing from the foregoing, will favor us with this information.

*No refiner quoting.

Better Free Air Service Means Bigger Gasoline Sales

BRUNNER
MODEL 939

Guaranteed pressure 200 lbs. per sq. in. Vibrationless. 32 gal. tank Capacity 3 cu. ft. per minute.



The average motorist is a man of habit. He gets his gas and oil and air in one place. There's a gas pump on nearly every corner but good air service is not so easily found. When he finds a place he goes there regularly.

Is your free air service the dependable kind that attracts business and holds it?

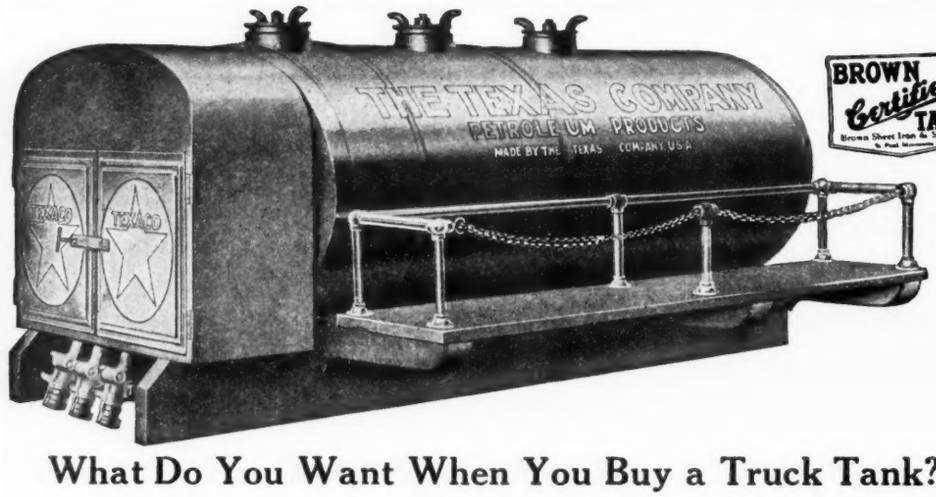
Brunner Air Compressors are the result of 20 years' experience in the air appliance field. They are dependable, durable, adaptable to many uses. They cost no more in the end. Write now for information.

BRUNNER
AIR COMPRESSORS

BRUNNER MANUFACTURING CO.
UTICA, N. Y.

Cincinnati, O.
Toronto, Ont.

Kansas City, Mo.
San Francisco, Cal.



BROWN Certified TANK
Brown Sheet Iron & Steel Co.
St. Paul, Minnesota

MORE GALLONAGE,

LESS SPACE

Brown Makes All Shapes

What Do You Want When You Buy a Truck Tank?

Absolute Tightness, Rugged Construction, Long Life, Appearance, a Perfect Fit on your Chassis and No Repair Bills.

We give All of these and more. ***At Prices Within Reason.***

BROWN SHEET IRON & STEEL CO. ST. PAUL, MINN.

— — — — — — *Tear out this page and mail it today* — — — — — —

We are interested in your tanks. Send your catalog and prices.

Make of Truck ..... Year ..... We operate ..... (number) Tank Trucks.

Other equipment on which you may send prices .....

Name ..... Address .....

Refinery Markets on Wax and Heavy Oil Products

Pennsylvania, Oklahoma, North and South Texas, Louisiana, Arkansas, California

WAX

PENNSYLVANIA	Prices June 7	Prices June 1	Prices May 24
	(Per Pound, New York)		
122-124 White Crude Scale..	5⅛- 5¼	5⅛- 5¼	5⅛- 5¼
124-126 White Crude Scale..	- 5¼	- 5¼	- 5⅛
OKLAHOMA			
	(Per Pound, Group 3)		
124-126 White Crude Scale..	4¾- 5	4¾- 5	4¾- 5
CALIFORNIA			
White Crude Scale.....	5½- 6	5½- 6	5½- 6

FUEL OIL

PENNSYLVANIA			
36-40 Fuel Oil.....	6¾- 7¼	6¾- 7¼	- 7
30-34 Fuel Oil.....	6¼- 6½	6¼- 6½	6¼- 6¾
28-30 Fuel Oil.....	6¼- 6½	6¼- 6½	6¼- 6½
OKLAHOMA			
38-40 Straw distillate.....	4⅜- 4⅝	4⅜- 4⅝	4⅜- 4⅝
36-38 Straw distillate.....	4¼- 4⅜	4¼- 4⅜	4¼- 4⅜
32-36 Gas oil (Gal.).....	- 4	- 4	4 - 4⅛
26-30 Fuel oil (Bbl.).....1.35	-1.40	1.35 -1.45	1.35 -1.45
24-26 Fuel oil (Bbl.).....1.27½	-1.32½	1.30 -1.35	1.30 -1.35
22-26 Fuel oil (Bbl.).....1.25	-1.27½	1.25 -1.30	1.25 -1.30
18-22 Fuel oil (Bbl.).....	-1.25	-1.25	-1.25
14-18 Fuel oil (Bbl.).....1.20	-1.25	-1.20	-1.20
KANSAS*			
38-40 Light straw distillate..	- 5	4⅝- 5	4⅝- 4⅞
36-38 Light straw distillate..	4½- 4⅝	4½- 4⅝	4½- 4⅝
32-36 Gas Oil.....	4⅜- 4½	4⅜- 4½	4⅜- 4½
18-22 Fuel Oil.....	-1.30	-1.30	1.30 -1.35
24-26 Fuel Oil.....1.40	-1.50	1.45 -1.50	1.50 -1.55
*F. O. B. refinery, Kansas destination.			
NORTH TEXAS			
38-40 Straw Distillate.....	4 - 4¼	4 - 4¼	4 - 4⅜
32-36 Gas Oil (Gal.).....	3⅝- 3⅞	3¾- 3⅞	3¾- 4
24-26 Fuel per (Bbl.).....1.30	-1.35	1.30 -1.35	-1.35

GULF COASTAL	Prices June 7	Prices June 1	Prices May 24
Fuel.....1.75	-1.85	1.75 -1.85	1.75 -1.85
Gas Oil.....	5½- 5¾	5½- 5¾	5½- 5¾
NORTH LOUISIANA			
32-36 Light Gas Oil (Gal.)..	4⅛- 4¼	4 - 4¼	4 - 4¼
16-20 Fuel Oil (Bbl.).....1.35	-1.40	1.35 -1.40	-1.30
ARKANSAS			
32-36 Gas Oil.....	4¼- 4½	4 - 4¼	- 4½
Smackover Crude Fuel.....1.20	-1.25	1.20 -1.25	1.20 -1.30
Road oil.....1.30	-1.36½	1.30 -1.36½	1.36½-1.47
CALIFORNIA*			
14-18 Fuel Oil (Bbl.).....	1.00	1.00	1.00
14-18 Bunker Oil (Bbl.).....	1.00	1.00	1.00
24-30 Gas Oil (Bbl.).....	1.15	1.15	1.15
27 + Diesel Oil (Bbl.).....	1.15	1.15	1.15
*(San Joaquin Valley, San Francisco 4c per bbl. more.)			
NEW ENGLAND			
	(F. O. B. Boston and Fall River)		
30-32 Gas Oil (Gal.).....	- 5⅞	- 5⅞	.....
Fuel Oil (Bunker C) Bbl...	-1.82½	-1.82½	.....

PETROLATUMS

PENNSYLVANIA			
Snow White.....	-11	-11	-11
Lily White.....	- 9½	- 9½	- 9½
Cream White.....	- 6¾	- 6¾	- 6¾
Light Amber.....	- 3⅞	- 3⅞	- 3⅞
Amber.....	- 3⅝	- 3⅝	- 3⅝
Red.....	3½- 3⅝	3½- 3⅝	3½- 3⅝
Green.....	1¾- 2	1¾- 2	1¾- 2

Above prices are f. o. b. refinery in tank car. They are the prices at which the bulk of the products on the open market move. Whoever has knowledge of any open market prices on any considerable quantity of goods differing from the foregoing, will favor us with this information.

(Continued from page 113)

Standard probably would let their prices remain 1 cent under those of its competitor.

Several refinery salesmanagers and representatives of marketing companies were asked this week what effect The Texas Co. gasoline was having on the jobbers. The majority replied that the plan was too new for the jobbers to have gotten their bearings.

One salesmanager declared, however, that his impression was that the jobbers had become apprehensive and probably would show considerable caution in buying gasoline.

Refiners generally expected spot business to pick up after the holiday. On Tuesday virtually every Group 3 refiner refused to take less than 12 cents per gallon for 58-60 U. S. Motor gasoline. Buying didn't materialize, however, and by Wednesday several were selling at 11¾ cents, both to the trade and for resale.

Even at this price, however, the demand was lacking and two or three who had been quoting 11¾ cents late in the week advanced their price to 12 cents, declaring that they could sell just as much at that price anyway as they had been able to sell at 11¾ cents.

One Favorable Factor

THERE is one factor apparently favorable to the refiners for June as compared with May. A large volume of gasoline was sold early in May for deferred shipment, 10⅞ to 11¼ cents per gallon. This gasoline offered refiners stiff competition late in the month after crude and tank wagon price advances.

The situation is different this month. While considerable gasoline has been bought at a flat price for over the month, little is belived to have been purchased under 11¾ cents. It stands to reason that the demand in June will be sufficient to take up this gasoline even at cost price, and refiners therefore are almost certain to get 11¾ cents and more for their gasoline unless too much is offered out of North Texas.

A considerable amount of natural gasoline is under contract this year and manufacturers report this material is moving in excellent fashion. Spot business is admittedly slow, however, and most purchases are only for a few cars at a time.

Several manufacturers believe The Texas Co. will also have considerable influence on the future of naturals. They believe a better grade of gasoline will be demanded by jobbers to compete with The Texas Co., and naturals will be used in larger quantities to meet this requirement. Many believe naturals will show their greatest strength next fall.

Kerosene Considerably Weaker

DESPITE the fact that kerosene stocks are abnormally low, and that July, August and September always show heavy shipments, the spot market has become woefully weak the past 10 days. Refiners who jumped in to make kerosene in order to take advantage of the good prices, now are finding their kerosene stocks gradually growing with the demand falling. Instead of moving cautiously and waiting for the fall demand to start, they apparently are getting perturbed over the present situation and are offering kerosene at almost any price to get it moved.

Kerosene buyers on the other hand have been quick to note the sagging tendency in prices and as the demand decreased they practiced a hand-to-mouth buying policy. The price accordingly has been cut so rapidly that in many instances in the last week a buyer could hold off as much as a day and save at least ⅛ cent a gallon.

Distillates and gas oil have been firm. While the demand for the former is not above normal at this time of the year, stocks are low enough for the prices to remain steady.

An export company late this week bought a quantity of 32-36 light gas oil in north Texas for export, paying as high as 4 cents a gallon. One refiner is known to have sold 25 cars and reports he could have sold 25 more, but the exact amount bought could not be ascertained.

Higher gravity fuel oils showed a tendency to weaken as the week closed, but lower gravity fuels were scarce enough to remain strong. Fuel oil stocks have been increasing rapidly and one or two refiners say they have had to sacrifice a little. Others declare they are going to run their fuel into storage, believing prices will soon turn upward.

Chicago Gasoline Market is Slow; Kerosene Prices are Lower

Staff Special

CHICAGO, June 5.

ALTHOUGH the after holiday gasoline demand from jobbers was greatly disappointing to the Chicago trade, prices of all grades were firm until the end of the week. Today the ¾-cent reduction in Standard Oil Co. of New Jersey's posted price for export gasoline at the Gulf tended to further weaken the high test market and bring refinery prices on the higher gravities closer to prices for U. S. Motor gasoline. Although the full effect of Standard's reduction has not yet been felt, it is generally believed there will be a tendency to substitute the higher gravities for U. S. Motor gasoline, unless export buying takes the over-supply now in storage in the field. Even now, gasoline of 60-62 gravity, 400 end point, is available to the jobber from some sources at the same prices quoted by most refiners for 58-60 U. S. Motor gasoline.

The purchases of gasoline by marketers for over June shipment are generally conceded to be comparatively small. Quotations made by marketers at present are based on buying prices in Group 3. The best buying price to be found on 58-60 U. S. Motor gasoline in the Group today was 11¾ cents; refiners were making this price direct to the trade, and were taking the bulk of the few spot gasoline orders to be had. The sales of marketers were confined to their regular customers who look to them as sources of supply instead of refiners.

Jobbers Well Stocked

THE exceptionally slow tone which has prevailed in the Chicago market over the week is laid to the enormous volume of distress gasoline which jobbers bought last week in expectation of large holiday demand; the latter failed to materialize and consequently their stocks by no means warrant, as yet, additional purchases for which they would have to pay from ¼ to ½ cent more than the goods in storage.

Chicago dealers look to a protracted period of good motoring weather as the only thing that will strengthen the gasoline market; many believe it will have a hard time holding its own unless weather conditions become better.

Most of the northern half of Standard Oil Co. of Indiana territory got through last week with only occasional showers, but in southern Michigan, Indiana, Missouri and Kansas, rainfall was heavy and not only prevented a normal amount of motoring but did considerable damage to roads. The weather man's forecast for the coming week is more promising. There will be scattered showers in the Great Lakes region, the Ohio valley and along the Mississippi river around the middle of the week and again toward the end but they will be of short duration, however, and temperatures will average normal for the season or slightly above.

Kerosene Prices Fall

KEROSENE, the demand for which has gradually fallen off with the close of the tractor season, has taken a rapid slide in price. Sales at the beginning of this week were made at 10 cents but on Saturday it was hard to find a buyer for 41-43 water white kerosene at 9½ cents; several marketers in Chicago were today selling short at 9 to 9¼ cents. The 42-44 water white grade, which is more plentiful than for some time past, was quoted today at 9¾ to 9⅞ cents for immediate shipment. Most marketers in Chicago express the opinion that there is a limit to the fall in kerosene prices on the grounds that refiners will shortly begin running kerosene into distillate storage in anticipation of greatly increased demand for home furnace oil next season.

PLATT'S
OILGRAM
Petroleum Markets-Every Day

2,907 TELEGRAMS

DURING the month of May, PLATT'S OILGRAM sent 2,907 wires to subscribers on tank-wagon and crude price changes.

This deluge of telegrams indicates how unsettled the markets have been the past four weeks. It proves that jobbers, refiners and natural gasoline manufacturers know the value of getting price changes *quickly*.

A sudden advance or decline in tank-wagon or crude may change market conditions decidedly *within a few hours* time.

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Distillate and gas oil have held steady over the week. Distillate of 38-40 gravity is bringing 4½ to 4¾ cents and 32-36 gas oil is averaging 4 to 4¼ cents. Occasional cars of cracked gas oil for resale have sold over this week at 3⅞ cents.

Fuel oil prices have held up remarkably well considering the off-season demand. Higher gravity fuel continues scarce in view of the fact that most refiners are cracking it. The 18-22, 22-26, and 24-26 gravity fuels are particularly scarce. Fuel oil movement is mostly made up of 14-16 and 16-18 gravity stuff which is bringing anywhere from $1.20 to $1.25. The 18-22 gravity fuel, where available, is held at $1.25 to $1.27½; 22-26 at $1.27½ to $1.30 and 24-26 at $1.30 to $1.35. These prices are for fuel oil with less than 0.75 per cent sulfur content; goods with no sulfur guarantee can be had at prices from 4½ to 5 cents lower. Smackover crude fuel was fairly steady over the week at $1.17½ to $1.20.

Week's Price Changes Tank Wagon Markets

Gasoline Changes

Standard of Louisiana—T.w. and s.s. prices gasoline advanced 1 cent, through territory, **June 4.**

Magnolia Petroleum—T.w. and s.s. prices gasoline advanced in Oklahoma in sufficient amount to bring prices to 21 cents and 24 cents, respectively, throughout state, including 3 cents state tax, **June 3.** Tulsa was advanced 1 cent, Muskogee and Oklahoma City 2 cents. This was to meet similar advance of The Texas Co. on June 1.

Canada—S. s. price gasoline advanced 1 cent at Sydney, N. S., to 37 cents, June 1. T. w. remained 34.5 cents.

Magnolia Petroleum — T.w. and s.s. prices gasoline advanced 1 cent in Texas, to 21 cents generally, **June 8.** Price at El Paso became 22 cents including tax. T.w. and s.s. prices in Texas are same, excepting that dealers are allowed a 3 cents discount from retail price.

* * *

Kerosene Changes

Canada—Kerosene advanced only ½ cent at St. John, N. B., to 26.5 cents, May 28, instead of 1 cent to 27 cents, as published in the June 2 issue of National Petroleum News.

Motor Benzol Price Advanced

NEW YORK, June 7.—The Barrett Co. on June 7 advanced motor benzol 1 cent to 25 cents a gallon.

Correction

Due to clerical error, price on North Texas Grade C natural gasoline in the May 26 and June 2 issues, the May 24 column, was omitted. On May 24 in both issues, price was 10 cents. This is shown in the May 24 column in the refinery table this week.

Tank Wagon, Service Station Markets for Gasoline and Kerosene In United States Territories and Canada

These Prices in Effect June 7, 1926

S.O. NEW JERSEY TERRITORY

	Gasoline T.W.	Tax	Total T.W.	S.S.	Oil T.W.
Atlantic City, N. J.	19	0	19	*	16
Newark, N. J.	19	0	19	21	16
Annapolis, Md.	19	2	21	*	16
Baltimore, Md.	19	2	21	24	16
Cumberland, Md.	19	2	21	24	16
Washington, D. C.	19	2	21	24	16
Danville, Va.	19	4½	23.5	*	16
Norfolk, Va.	19	4½	23.5	26.5	16
Richmond, Va.	19	4½	23.5	26.5	16
Roanoke, Va.	19	4½	23.5	26.5	16
Petersburg, Va.	19	4½	23.5	*	16
Williamsburg, Va.	19	4½	23.5	*	16
Charleston, W. Va.	19	3½	22.5	25.5	16
Clarksburg, W. Va.	19	3½	22.5	25.5	16
Keyser, W. Va.	19	3½	22.5	*	16
Parkersburg, W. Va.	19	3½	22.5	25.5	16
Wheeling, W. Va.	19	3½	22.5	25.5	16
Charlotte, N. C.	19.5	4	23.5	26.5	16
Hickory, N. C.	19.5	4	23.5	*	16
High Point, N. C.	19.5	4	23.5	*	16
Mt. Airy, N. C.	19.5	4	23.5	*	16
Salisbury, N. C.	19.5	4	23.5	*	16
Charleston, S. C.	19.5	5	24.5	27.5	16
Columbia, S. C.	19.5	5	24.5	27.5	16

*Dealers set own prices. S. O. New Jersey does not operate station.

S. O. NEW YORK

*New York City	21	0	21	25	17
Albany, N. Y.	21	0	21	23	17
Buffalo, N. Y.	20	0	20	23	17
Rochester, N. Y.	21	0	21	25	15
Syracuse, N. Y.	21	0	21	23	16
Boston, Mass.	21	0	21	24	17
Augusta, Me.	21	3	24	27	17
Manchester, N. H.	21	2	23	27	17
Burlington, Vt.	21	2	23	25	17

*In steel barrels.

ATLANTIC REFINING

Pittsburgh, Pa.	20	0	20	*25	17
Philadelphia, Pa.	20	0	20	*25	17
Allentown, Pa.	20	0	20	*25	17
Erie, Pa.	18	0	18	*23	15
Scranton, Pa.	20	0	20	*25	17
Altoona, Pa.	20	0	20	*25	17
Dover, Del.	20	2	22	25	17
Wilmington, Del.	20	2	22	25	17
Providence, R. I.	21	1	22	24	17
Boston, Mass.	21	0	21	24	17
Springfield, Mass.	21	0	21	23	17
Worcester, Mass.	21	0	21	24	17
Hartford, Conn.	21	2	23	26	16
New Haven, Conn.	21	2	23	26	17

*Contains 2-cent tax collected by retail dealer and paid by him directly to state.

S. O. KENTUCKY

Lexington, Ky.	20	5	25	28	19
Louisville, Ky.	20	5	25	28	18
Covington, Ky.	19	5	24	27	19
Clarksdale, Miss.	19	4	23	26	17.5
Jackson, Miss.	19	4	23	26	16.5
Natchez, Miss.	18.5	4	22.5	25.5	17
Vicksburg, Miss.	18.5	4	22.5	25.5	17
Birmingham, Ala.	20	2	22	25	19.5
Mobile, Ala.	19	2	21	24	18
Montgomery, Ala*	21	2	23	26	20.5
Atlanta, Ga.	†21	3½	25	28	20
Augusta, Ga.	†21	3½	25	28	20
Macon, Ga.	†21	3½	25	28	20
Savannah, Ga.	†19	3½	23	25	18
Jacksonville, Fla.	19	4	23	26	18
Miami, Fla.	21	4	25	28	19.5
Tampa, Fla.	19	4	23	26	18
Pensacola, Fla.	19	4	23	26	18.5

*Local privilege tax of 1 cent on gasoline and ½ cent on kerosene at Montgomery included.

†Georgia has ½ cent per gal. inspection fee on gasoline which is deducted as well as the state gasoline road tax of 3½ cents, to get the actual net tank wagon market to dealer.

S. O. INDIANA

	Gasoline T.W.	Tax	Total T.W.	S.S.	Oil T.W.
Chicago, Ill.	19	0	19	21	15.5
Decatur, Ill.	19.2	0	19.2	21.2	16
E. St. Louis, Ill.	18.1	0	18.1	20.35	15.1
Joliet, Ill.	19.4	0	19.4	21.4	16.2
Peoria, Ill.	19.2	0	19.2	21.2	16
Quincy, Ill.	19.2	0	19.2	21.2	15.8
Indianapolis, Ind.	19.2	3	22.2	24.2	16.2
Evansville, Ind.	19	3	22	24	16
South Bend, Ind.	19.4	3	22.4	24.4	16.4
Detroit, Mich.	19.8	2	21.8	23.8	16.7
Grand Rapids, Mich.	19.7	2	21.7	23.7	16.6
Saginaw, Mich.	19.9	2	21.9	23.9	16.8
Madison, Wis.	19.3	2	21.3	23.3	16
Milwaukee, Wis.	19.1	2	21.1	23.1	15.8
La Crosse, Wis.	20.2	2	22.2	24.2	16.9
Minneapolis, Minn.	20.2	2	22.2	24.2	17.1
Duluth, Minn.	20.5	2	22.5	24.5	17.1
Mankato, Minn.	20.1	2	22.1	24.1	16.9
Des Moines, Iowa	19.5	2	21.5	23.5	16.4
Davenport, Iowa	19.5	2	21.5	23.5	16.4
Sioux City, Iowa	19	2	21	23	16
Mason City, Ia.	19.5	2	21.5	23.5	16.4
St. Louis, Mo.	18.6	2	20.6	22.9	15.5
Kansas City, Mo.	††19.9	2	21.9	23.9	14.8
St. Joseph, Mo.	*19	2	21	23	15.4
Fargo, N. D.	21.9	1	22.9	24.9	19.1
Grand Forks, N. D.	22.2	1	23.2	25.2	19.4
Minot, N. D.	21.9	1	22.9	24.9	19.1
Pierre, S. D.	20.5	3	23.5	25.5	17.6
Huron, S. D.	19.5	3	22.5	24.5	17.6
Wichita, Kans.	17.8	2	19.8	21.8	15.3
Bartlesville, Okla.	17.8	3	20.8	22.8	15.3

†Dumps of 100 or more gallons at 18c per gallon.
*Includes city tax of ½c.
††Includes city tax of 1c.

S. O. NEBRASKA

Crawford, Neb.	20	2	22	*	16.75
Omaha, Neb.	19.25	2	21.25	23.25	16
McCook	20.75	2	22.75	24.75	17.5
Norfolk	19.75	2	21.75	23.75	16.5
North Platte	20.75	2	22.75	24.75	17.25
Scottsbluff	20.25	2	22.25	24.25	16.75

*Standard has no service station here.

CONTINENTAL OIL

Denver, Colo.	20	2	22	22	19
Pueblo, Colo.	20	2	22	24	19
Casper, Wyo.	20	2½	22.5	24.5	17.5
Cheyenne, Wyo.	21	2½	23.5	25.5	19
Butte, Mont.	22	2	24	24	21
Helena, Mont.	24	2	26	28	21
Salt Lake City, Utah	22.5	3½	26	28	19
Boise, Ida.	24	3	27	29	21
Albuquerque, N. M.	26.5	3	29.5	29.5	21

S. O. CALIFORNIA

Phoenix, Ariz.	22	3	25	28	21.5
Los Angeles, Cal.	14.5	2	16.5	20.5	15.5
Fresno, Cal.	16.5	2	18.5	22.5	17.5
San Francisco, Cal.	16	2	18	22	15.5
Reno, Nev.	19.5	4	23.5	27.5	19
Portland, Ore.	16	3	19	23	16.5
Seattle, Wash.	16	2	18	22	16.5
Spokane, Wash.	20	2	22	26	20.5
Tacoma, Wash.	16	2	18	22	16.5

S. O. LOUISIANA

Little Rock, Ark.	18	4	22	25	16
Alexandria, La.	18	2	20	23	16
Baton Rouge, La.	17	2	19	22	14.5
Lake Charles, La.	18.5	2	20.5	23.5	16
New Orleans, La.	*18.5	2	20.5	23.5	15
Shreveport, La.	17	2	19	22	15
Lafayette, La.	18	2	20	23	15.5
Bristol, Tenn.	20.5	3	23.5	26.5	17.5
Chattanooga, Tenn.	20	3	23	26	17.5
Knoxville, Tenn.	20	3	23	26	18
Nashville, Tenn.	19	3	22	25	18
Memphis, Tenn.	18	3	21	24	17

*Includes 1c city tax on gasoline and kerosene.

S. O. OHIO

	Gasoline T.W.	Tax	Total T.W.	S.S.	Oil T.W.
All Ohio points	20	2	22	24	17

MAGNOLIA PETROLEUM

Muskogee, Okla.	18	3	21	24	16
Oklahoma City	18	3	21	24	16
Tulsa, Okla.	18	3	21	24	16
Fort Smith, Ark.	17	4	21	24	16.5
Little Rock, Ark.	17	4	21	24	16.5
Texarkana, Ark*	19	4	23	23	15
Dallas, Tex.	19	1	**20	20	15
El Paso, Tex.	20	1	**21	21	16
Fort Worth, Tex.	19	1	**20	20	15
Houston, Tex.	19	1	**20	20	15
San Antonio, Tex.	19	1	**20	20	15

*Within city of Texarkana, Ark., the state tax on gasoline is 1c per gal. conforming with the Texas state tax. In Texarkana district outside of the city the 4c state tax applies.

**Magnolia is maintaining only one price schedule in Texas—its retail schedule. This is in keeping with its new contract, effective May 5, which allows the dealer 3c off the retail price.

V. M. & P. NAPHTHA

(Changes ordinarily occur coincident with gasoline)

	Oleum Spirits	V.M.&P. Naphtha	Cleaners Naphtha
Chicago	20	22	22
Detroit	21.2	23.7	23.7
Kansas City	20.2	22.2	22.2
Milwaukee	20.2	*24.7	*24.7
Minneapolis	21.5	*26	*26
St. Louis	19.4	21.9	23.2
New York	...	22	....

*Including state tax.

CANADA

(Per Imperial Gallon, which is 1.2 American Gallons)

ONTARIO

	Gasoline T.W.	Tax	Total T.W.	S.S.	Oil T.W.
Toronto	26.5	3	29.5	33	24
Ottawa	26.5	3	29.5	33	24
Cochrane	31.5	3	34.5	44	29
Ft. William	29.5	3	32.5	37	25.5

MANITOBA

Winnipeg	29.5	3	32.5	36	26

SASKATCHEWAN

Regina	32.5	0	32.5	37	29

ALBERTA

Edmonton	31.5	2	33.5	37	28.5
Calgary	29.5	2	31.5	35	26.5

BRITISH COLUMBIA

Vancouver	23	3	26	30	23

QUEBEC

Montreal	26.5	3	29.5	33	24
Quebec City	28.5	3	31.5	35	26
Three Rivers	28.5	3	31.5	35	26

NEW BRUNSWICK

St. John	29.5	3	32.5	36	27
Moncton	29.5	3	32.5	36	27.5

NOVA SCOTIA

Halifax	29.5	3	32.5	36	27
Sydney	31.5	3	34.5	37	27.5

PRINCE EDWARD ISLAND

Charlottetown	29.5	3	32.5	36	27

Note: In districts surrounding these points 1c additional is added to city price.

Export Gasoline Firm Although Buying Is on Hand-to-Mouth Basis

Special Correspondent

NEW YORK, June 7

EXPORT buyers are studying the gasoline situation closely although still operating hand-to-mouth. Stocks of gasoline abroad are fairly well absorbed, according to oil men returning from abroad, and while many of the big European marketers are skeptical about paying the recent advances, the consensus is that there will be a much better demand from Britain and the Continent before July 1.

Gasoline held firm. A leading Gulf refiner advanced U. S. Motor to 13 cents a gallon, while the other refiners were still quoting 12½ cents. Kerosene, although a shade easier, did not fluctuate to any extent. Stocks are small and Europeans are expected to anticipate fall requirements soon. Waxes ruled slightly firmer. Bunker oil was steady. Diesel oil is higher at New York. Motor gasoline was firmer all along the Atlantic Seaboard.

Export Gasoline—New York

It is persistently rumored that a leading refiner booked a cargo of 40,000 barrels of U. S. Motor at 14 cents a gallon and water white kerosene at 11 cents for July shipment to the United Kingdom but confirmation is lacking. Local refiners are asking 14½ cents a gallon for motor gasoline at the refineries.

A French buyer was inquiring for 50,000 barrels of U. S. Motor, 64-66 gravity 375 e.p. and water white kerosene for July shipment. One of the large Independents expects to close this deal early this week. Sentiment is bullish and local factors are predicting 15 cents for bulk gasoline before July 1st. Cased gasoline is in better demand. A leading Independent is reported to have sold 40,000 cases for nearby shipment to Japan.

Export Gasoline—Gulf Ports

During the latter part of the week a leading refiner advanced the price of U. S. Motor in bulk to 13 cents a gallon. As the week closed there was still a fairly large quantity offering at 12½ cents. Sentiment is much better. Refiners show more confidence owing to the marked increase in export inquiries. A leading Independent is reported to have closed a cargo of 64-66 gravity 375 e. p. gasoline and water white kerosene involving 35,000 barrels, for July shipment to France. This concern is working on another cargo of 50,000 barrels of U. S. Motor 64-66 375 end point gasoline and prime white kerosene for July shipment to the United Kingdom.

A French buyer is reported to have purchased 40,000 barrels of 61-63 390 e.p. at 13¾ cents; U. S. Motor at 12¼ cents and water white kerosene at 9¼ cents from a leading Independent for August shipment. Cased gasoline was steady but quiet. U. S. Motor in cargo lots was offered at $2.35 a case while 64-66 375 e.p. was quoted at $2.50 a case. One of the leading refiners is reported to be working on an inquiry for 50,000 cases of Motor and 64-66 375 e.p. for August shipment to the Far East.

Domestic Gasoline—New York

Gasoline demand showed the expected improvement. Although weather conditions have been cooler than anticipated consumption of gasoline is soaring and all of the big refiners were quoting U. S. Motor at 14½ cents a gallon refinery and 15½ cents a gallon in tank cars delivered to the jobbing trade. California U. S. Motor was quoted at 14½ cents a gallon, at Atlantic Seaboard terminals. No further tank wagon advances were announced although the trade looks for higher prices before July 15th.

Domestic Gasoline—Gulf Ports

Jobbers are buying more heavily. Bulk gasoline is firmer and the condition of this market is steadily improving. U. S. Motor in tank cars at the refineries is held at 12¾ cents a gallon. Consumption is soaring and the trade looks for higher bulk prices soon. No tank wagon advances were reported last week.

Export Kerosene—New York

Export demand for water white kerosene was slightly better although most of the orders reported were for a few hundred barrels or cases. No bulk movements were reported and the price in bulk was unchanged at 11½ to 12 cents a gallon at the refineries. Prime white was quoted at 11 cents a gallon, in bulk at the refineries.

A South American buyer is reported to have purchased 25,000 cases of prime and water white kerosene for August shipment but details were lacking. One of the smaller refiners reported the sale of 20,000 cases of prime and water white kerosene for July shipment to the Near East.

Export Kerosene—Gulf Ports

Foreign demand for kerosene was spasmodic. No bulk sales in addition to those already reported were heard of. Water white was well maintained at 9¼ to 9½ cents a gallon, with most factors quoting the outside price. Prime white was steady and unchanged at 8¼ cents a gallon. Stocks are light owing to the unusually active demand for this time of the year and the reduced output.

Cased kerosene was a trifle easier. Business was fair. A leading Independent closed 45,000 cases of prime and water white for July-August shipment to China at $2.00 and $2.15 a case respectively. This concern is working on an inquiry for 30,000 cases for August shipment to Australia.

Domestic Kerosene

Domestic consumption of kerosene continues much heavier than expected and prices are well established. Stocks are depleted. Water white at Atlantic Seaboard terminals is held at 11½ to 12 cents a gallon, in bulk, and delivered to the trade in tank cars at 12½ to 13 cents a gallon. Prime white is quoted at 11 cents refinery. Tank wagon prices were unchanged.

In the Gulf section water white in bulk at the refineries was steady and unchanged at 10½ cents a gallon at the refineries in tank cars. Domestic demand is lighter.

Lubricants—New York

Pennsylvania cylinder stocks continued to strengthen last week. Export inquiries are still far more numerous than orders but underlying conditions are improving and leading factors have advanced Pennsylvania 600 steam refined unfiltered cylinder oil to 24 cents a gallon, in barrels, New York. For filtered D stock the price was moved up ½ cent to 30 cents a gallon, in barrels, New York. French buyers were credited with three purchases of approximately 500 barrels each according to local oil men but details were lacking.

Lubricants—Gulf Ports

Demand for Gulf Coastal lubricants is slightly better. There has been considerable competition in these oils the past few weeks, and the situation is not wholly cleaned up yet although prices are gradually stiffening. Export demand is light and spasmodic, buyers holding off pending developments.

Bunker Oil—New York

Demand for grade C bunker oil improved a little last week. Most of the local refiners are still quoting $1.75 a barrel at the refineries and $1.81½ a barrel f.a.s. New York Harbor. No export buying of consequence developed. There is a large contract movement going on which tends to keep stocks down. The demand for Diesel oil is more active and leading factors are asking $2.50 a barrel at the refineries against $2.41½ a week ago.

Bunker Oil—Gulf Ports

Demand for grade C bunker oil was more active and for bunkering purposes the price was $1.60 a barrel f.o.b. New Orleans while in cargoes there was vir-

tually nothing available below $1.50 a barrel. The recent advance in crude oil has tended to strengthen this market considerably. At Tampico, grade C bunker oil was quoted at $1.50 including taxes, for bunkering purposes and $1.40 a barrel in cargo lots also including taxes. Heavy Panuco crude oil was nominal at $1.20 a barrel, taxes to be added. There was an inquiry from the United Kingdom for 55,000 barrels of grade C bunker oil for July shipment but this is still pending.

Waxes—New York

Demand for fully refined wax was slightly better last week. Europeans seem more keenly interested. United Kingdom buyers have been inquiring more actively than for some time back, but the price structure of the market underwent little change. Most of the export buying is still confined to five and ten ton lots but exporters appear more confident and are less inclined to press sales. Fully refined 120-122 A.M. P. was well held at 6 cents a pound, New York.

White crude scale wax is steadier. For 122-124 A.M.P. the price is still held at 5.20 cents while 124-126 A.M.P. has been marked up 5 points to 5.25 cents a pound. Semi refined waxes ruled quiet and unchanged.

Waxes—Gulf Ports

Demand for white crude scale wax is improving. A Continental buyer was inquiring for fifty tons of 124-126 A.M.P. but whether this was closed or not was not determined. This grade was held at 5.15 cents a pound while 122-124 A.M. P. was quoted at 5.10 cents a pound. Semi refined 124-126 A.M.P. was quoted at 5⅜ cents a pound.

Fully refined waxes are holding up fairly well. For 125-127 A.M.P. the price was 5.80 cents while 128-130 was quoted at 5.85 cents and 130-132 at 6.05 cents. The asking price for 133-135 A. M.P. was 6.25 cents and for 135-137 A.M P. 6.65 cents a pound.

Gas Oil—New York

This market ruled firm and leading refiners have advanced 28-34 gravity ¼c to 6 cents a gallon while 36-40 was well held at 6½ cents a gallon. No export buying of consequence developed, but domestic demand is better than usual for this time of the year. Stocks are moderate. There was an inquiry from the Continent, presumably from Scandinavia, for 35,000 barrels of gas oil for July shipment.

Gas Oil—Gulf Ports

Gas oil held firm throughout the week. One of the large Independents is reported to be working on a cargo of 28,000 barrels of 26-28 transparent for July shipment to the United Kingdom. This grade is quoted at 5½ cents a gallon while 32 plus dark gas oil is steady but dull at 5¼ cents a gallon. Stocks of gas oil are small owing to the heavy cracking going on.

Complete Export Markets

New York Export Market

GASOLINE	June 7	May 31
U. S. Motor Tank cars Ref....	-14½ 14	-14½
U. S. Motor cases	29.40	-29.40
California grade U. S. Motor F. O. B. N. Y. Bulk	-14½ 14	-14½
KEROSENE		
41-43-150 W. W. Tank cars Ref..	11½-12	11½-12
41-43-150 W. W. Cases	20.40	-20.40
42-44-110 S. W. Cases	19.15	-19.15
GAS OIL		
36-40, Bulk Refinery	-06½	-06½
28-34, Bulf Refinery	-06	-05¾
MEXICAN BUNKER OIL		
Grade C, f. o. b. ref. Bulk	1.75	- 1.75
Diesel Oil f. o. b. ref. Bulk	2.50	- 2.41½

LUBRICATING OILS

The following prices are cooperage basis f. o. b. New York, products being manufactured by inland refineries.

CYLINDER OILS (Bbls.) 1 inch Immersion Test; All Penna. Products		
Filtered D 600	30	-29½
Filtered E 600	28½	-28½
Unfiltered 600 s. r.	24 -24½	23½-24
Unfiltered 650 s. r.	29½	-29
600 flash s. r.	30	-30
630 Flash	41	-41
RED PARAFFIN (Bbls.) (Viscosity at 70)		
300 vis. No. 5 color	21	-21
250 vis. No. 5 color	20	-20
High Viscosity No. 5 color	25	-25
NEUTRAL OILS (Bbls.) (Viscosity at 70)		
200 vis. at F. Pale. No. 3 color	-31	-31
180 Pale. No. 3 color	-29	-29
150 Pale. No. 3 color	-24½	-24½
BLACK OIL (Bbls.)		
25-30 cold test	15½	-15
15 cold test	14½	-14¾

MEDICINAL OILS
(Includes Price of Drums)
(Penna. Stocks)

	June 7	May 31
Domestic 875-.885 s. g.	-1.10	-1.10
Domestic 865-.870 s. g.	.85- .90	.85- .90
Russian 885-.890 s. g. 325-330 vis.	1.10-1.25	1.10-1.25
WAXES (Penna. Stocks) (F. A. S. Carload Lots)		
WHITE CRUDE SCALE		
122-124 A. m. p.	-5.20	-5.20
124-126 A. m. p.	-5.25	-5.20
MATCH		
105-108 A. m. p.	-06	-06
FULLY REFINED		
120-122 A. m. p.	-06	-06
123-125 A. m. p. Philadelphia..	-06	-06
125-127 A. m. p.	-06½	-06¾
128-130 A. m. p.	-06¾	-06¾
130-132 A. m. p.	-06½	-06½
133-135 A. m. p.	-06¾	-06¾
135-137 A. m. p.	-07	-07
SEMI REFINED		
122-124 A. m. p.	-05¾	-05¾
YELLOW CRUDE SCALE		
124-126 A. m. p.	5.05	-05

PETROLATUMS
(Penna. Stocks)
Per Pound

Dark Green	03	03
Veterinary	03¼	03¼
Light Amber	03¾	03¾
Dark Amber	03¾	03¾
Cream	06½	06½
Lily White	08¼	08¼
Snow White	11 -11¾ 11	-11¾

Gulf Export Market

GASOLINE
F. O. B. Seaboard
Shipments of 20,000 Bbls. and over

	June 7	May 31
U. S. Motor, Cargo	12½	12¼-.12½
60-62 400 e. p. Bulk	13½	-.13¾
64-66 375 e. p. Bulk	14¾	-.15½
U. S. Motor, Cases (cargo lots)	2.35	2.30
64-66, Cases (cargo lots)	2.50	2.60
KEROSENE		
Water White, 41-43 bulk	09¼-09½	09¼-09½
Prime White, 42-44 bulk	08¼-08½	08¼-08½
Water White, cases (cargo lots)	2.15	-2.15
Prime White, cases (cargo lots)	2.00	-2.05
DOMESTIC GAS AND BUNKER OIL		
26-28, gravity, bulk*	05¼-05½	05¼-05½
32 plus, bulk, Dark	05	-05
Grade C, Bunker oil	1.60	-1.60
Cargoes	1.50	-1.50

*Transparent through neck of a 4 oz. bottle.

MEXICAN CRUDE AND BUNKER OILS
F. O. B. Steamer Tampico

Heavy, Taxes to be added	1.20	nominal
Grade C, Bunker oil Taxes paid	1.40-1.50	1.40-1.45
Grade C, Bunker oil F. O. B. New Orleans	1.60	-1.55

SOUTH TEXAS
(Viscosity at 100°F; cold test 0)
(Tanker, F. O. B. Houston)

*LUBRICATING OILS	June 7	May 31
100 Vis. No. 2 Unfiltered Pale	07¼	07¼
150 Vis. No. 2½ Unfiltered Pale	09¼	09¼
200 Vis. No. 3 Unfiltered Pale	11	11
300 Vis. No. 3 Unfiltered Pale	13	13
500 Vis. No. 3½ Unfiltered Pale	14¼	14½
200 Vis. No. 5½ Red Oil	10¼	10½
300 Vis. No. 5½ Red Oil	11	11
500 Vis. No. 6 Red Oil	11½	11½
800 Vis. No. 6 Red Oil	16	16

*These prices are entirely nominal owing to wide fluctuations.

Pacific Export Market

(Cargo lots quotations at seaboard, Los Angeles)

	June 7	May 31
Gasoline, U. S. Motor— 54°-56°	11 -11¼	11 -11¼
Gasoline, U. S. Motor— blends and special cuts	11¼-11½	11¼-11½
Gas Oil, 24°—30°B. per bbl.	$1.15	$1.15
Diesel Oil, 27°B—plus per bbl.	$1.15	$1.15
Bunker Oil, 14°—18°B. per bbl.	$1.00	$1.00
Fuel Oil, 14°—18°B. per bbl.	$1.00	$1.00
Kerosene, W. W. 40°—42° B per gal., 125-150 flash test	05¾-06¾	.05¾-.06¾
Cased Goods		
Gasoline, U. S. Motor	$2.55	$2.55
Kerosene, W. W. 38°—40° B per case, flash test 125-150	$1.50-1.55	$1.50-1.55

N. Y. Domestic Market

The following light oil, gas and fuel oil prices are F. O. B. New York refineries, being products made from Domestic (including California) and Mexican Crudes.

	June 7	May 31
U. S. Motor Gasoline, Tank Cars Delivered greater N. Y.	15½	15 -15½
U. S. Motor Gasoline, Tank Cars Bayonne	14½	14 -14½
U. S. Motor, Tank Cars, *Atlantic Seaboard Terminals	14½	14 -14½
Kerosene, 41-43 150 W. W. Tank Cars De'd greater N.Y.	11½-12	11½-.12
Grade C Bunker f.o.b. N.Y. Ref.	1.75	1.75
Diesel Oil f. o. b. Refinery	2.50	2.41½
Gas Oil, 36-40, Bulk Refinery	-06½	-06½
Gas Oil 28-34 Bulk, Refinery	-06	-05¾

*New York, Philadelphia, Portsmouth, Va. Charleston, S. C.

Crude Oil Prices All Fields

PRICES IN EFFECT, *June 7*

EASTERN FIELDS

Posted by Joseph Seep Purchasing Agency

Penna. Grade Oil in New York Transit Lines (Alleghany, N. Y. District)	$3.65
Bradford District Oil in National Transit Lines (Bradford District)	3.65
Penna. Grade Oil in National Transit Lines (Other Pennsylvania)	3.55
Penna. Grade Oil in Southwest Penna. Pipe Lines (Other Pennsylvania)	3.55
Penna. Grade Oil in Eureka Pipe Lines (West Virginia)	3.50
Penna. Grade Oil in Buckeye Pipe Lines (Macksburg, O. district)	3.30
Keister Grade in National Transit Lines (Butler Co.)	2.45
Gaines, Tioga Co. (Pa.)	3.10
Cabell Grade in Eureka Pipe Lines (West Virginia)	2.40
Corning Grade in Buckeye Pipe Lines (Ohio)	2.55
*Somerest Medium in Cumberland Pipe Lines (Kentucky)	2.50
*Somerset Light in Cumberland Pipe Lines (Kentucky)	2.65
Ragland Grade in Cumberland Pipe Lines (Kentucky)	1.25

*Somerset oil run prior to Oct. 1, 1923, takes price of 6 cents lower than above quotations.

CENTRAL STATES FIELDS

Posted by Ohio Oil Co.

Wooster	$2.55	Illinois	$2.37
Lima	2.48	Plymouth	1.90
Waterloo	1.35	*Canadian Petrolia	2.88
Indiana	2.25	*Posted by Imperial Oil, Ltd.	
Princeton	2.37		

OKLAHOMA, KANSAS And NORTH TEXAS FIELDS

(Prices of Prairie Oil & Gas Co.)
(Prairie's prices apply in Oklahoma, Kansas, North and Central Texas)

28-28.9	$1.65	41-41.9	$2.69
29-29.9	1.73	42-42.9	2.77
30-30.9	1.81	43-43.9	2.85
31-31.9	1.89	44-44.9	2.93
32-32.9	1.97	45-45.9	3.0
33-33.9	2.05	46-46.9	3.09
34-34.9	2.13	47-47.9	3.17
35-35.9	2.21	48-48.9	3.25
36-36.9	2.29	49-49.9	3.33
37-37.9	2.37	50-50.9	3.41
38-38.9	2.45	51-51.9	3.49
39-39.9	2.53	52 and above	3.57
40-40.9	2.61		

Effective May 15, The Texas Co. posted same gravity and price schedule as Prairie in Oklahoma, Kansas, North, North Central and Central Texas fields.

Humble Oil & Refining Co. Prices

(Ranger, North Texas, Mexia, Powell, Richland, Wortham, Lytton Springs, Currie and Moran crudes all in Texas.)

Effective May 15, Humble posted same gravity and price schedule in all the above fields as that posted by Prairie, excepting that Humble is paying 8c less for each full degree below 28 gravity.

Mirando, Tex	$1.25

Magnolia Petroleum Co. Prices In Oklahoma, Kansas and North Texas

Effective May 15, Magnolia posted same gravity and price schedule as Prairie, in all fields where it purchases on a gravity basis, excepting that it is paying $1.30 for all oil below 28 gravity.

Effective May 15, Corsicana heavy was advanced to $1.25 per barrel.

NORTH LOUISIANA—ARKANSAS FIELDS

***Prices of the Standard Oil Co. of Louisiana**

Caddo, below 32	$2.10
" below 32-34.9	2.25
" 35-37.9	2.35
" 38 and above	2.45
Homer, below 31	1.85
" 31-32.9	2.00
" 33-34.9	2.10
" 35 and above	2.20
Haynesville, below 33	2.00
" 33 and above	2.10
El Dorado, including Lisbon, below 33	2.00
" 33-34.9	2.10
" 35-36.9	2.20
" 37 and above	2.30
Bull Bayou, 32-34.9	1.95
" 35-37.9	2.10
" 38 and above	2.25
Smackover, below 24	1.10
" 24-24.9	1.35
" 25-25.9	1.40
" 26-26.9	1.45
" 27 and above	1.50
De Soto	2.30
Crichton	2.10
Bellevue	1.50
Cotton Valley	1.20
**Urania, La	1.15

*Same prices maintained by The Texas Co., excepting on Caddo below 32 which was unchanged by The Texas Co. at $1.85. Gulf Refining Co. of Louisiana and Louisiana Oil Refining Corp. are also paying same prices as Standard in fields where they purchase. All purchasers of Smackover are maintaining the same gravity and price schedule as Standard. Gulf is paying 95c for Calion (East El Dorado Crude.)

**Posted by Louisiana Oil Refining Corp.

STEPHENS, ARKANSAS

Posted by Louisiana Oil Refining Corp., and Atlantic Oil Producing Co.

26 and above	$1.65	Below 26	$1.45

GULF COASTAL FIELDS

Posted by Humble Oil & Refining Co.

Grades A	$1.60	29-29.9	$1.75
Grades B:		30-30.9	1.80
Below 25	1.50	31-31.9	1.85
25-25.9	1.55	32-32.9	1.90
26-26.9	1.60	33-33.9	1.95
27-27.9	1.65	34-34.9	2.00
28-28.9	1.70	35 and above	2.05

Humble is paying the above prices in Goose Creek, Hull, Liberty, West Columbia, Orange and Pierce Junction fields. All other Gulf Coastal crudes are classified as A grades only. Other major purchasers are The Texas Co., Gulf Production Co., Sun Oil Co., and Sinclair Crude Oil Purchasing Co.

ROCKY MOUNTAIN FIELDS

Prices of Ohio Oil Co. and Midwest Refining Co.

†Salt Creek 29-29.9	$1.73
" " 30-30.9	1.81
" " 31-31.9	1.89
" " 32-32.9	1.97
" " 33-33.9	2.05
" " 34-34.9	2.13
" " 35-35.9	2.21
" " 36-36.9	2.29
" " 37 and above	2.37
Elk Basin	2.40
Grass Creek light	2.40
Big Muddy	2.25
Lance Creek	2.40
Rock Creek	2.25
†Osage	2.40
†Cat Creek, Mont	2.40
Sunburst, Mont	1.05
†Hogback, N. Mex	2.45
Artesia, N. Mex	2.20

†Posted by Midwest Refining Co. Midwest also buys Grass Creek light, and Elk Basin.

The Texas Co. buys Salt Creek and Big Muddy crude.

CALIFORNIA

Standard Oil Co. of California

Santa Maria and Ventura Posted by *Union Oil Co.

Gravity	Signal Hill Huntington Beach	Ingle-wood Torrance	Newhall, McKittrick, Whittier La Habra	Kern River	Olinda-Brea Canon, Richfield	Athens-Rosecrans Dominguez	Monte-bello	Coyote Hills	Santa Fe Springs	Midway-Sunset Elk Hills	Lost Hills	Coalinga	Wheeler Ridge	Santa Maria	Ventura
14-14.9	$ .85	$ .85	$ .85	$ .75	$ .85	.....	$ .85	$ .85	.....	$ .75	$ .75	$ .75	$ .75	$ .85	$ .85
15-15.9	.87	.87	.85	.75	.87	.....	.85	.85	.....	.75	.75	.75	.75	.85	.85
16-16.9	.90	.90	.85	.75	.90	.....	.85	.85	.....	.75	.75	.75	.75	.85	.85
17-17.9	.94	.94	.85	.75	.94	.....	.85	.85	.....	.75	.75	.75	.75	.85	.85
18-18.9	.98	.98	.86	.75	.98	.....	.86	.86	.....	.75	.75	.75	.75	.85	.85
19-19.9	1.04	1.04	.87	.75	1.04	.....	.87	.87	.....	.75	.75	.75	.75	.85	.85
20-20.9	1.10	1.10	.89	.....	1.10	.....	.89	.90	.....	.82	.82	.79	.78	.90	.90
21-21.9	1.16	1.16	.91	.....	1.16	.....	.91	.98	.....	.90	.90	.86	.81	.97	.97
22-22.9	1.22	1.22	.94	.....	1.22	.....	.94	1.06	.....	1.00	1.00	.93	.85	1.04	1.04
23-23.9	1.28	1.28	.....	.....	1.28	.....	.97	1.14	.....	1.11	1.11	1.00	.89	1.11	1.11
24-24.9	1.34	1.34	.....	.....	1.34	$1.34	1.01	1.22	1.02	1.22	1.22	1.07	.93	1.18	1.18
25-25.9	1.40	1.40	.....	.....	1.40	1.40	1.05	1.30	1.08	1.33	1.33	1.14	.97	1.25	1.25
26-26.9	1.46	1.46	.....	.....	1.46	1.46	1.09	1.38	1.16	1.44	1.44	1.21	1.01	1.32	1.32
27-27.9	1.52	1.52	.....	.....	1.52	1.52	1.13	1.46	1.24	1.55	1.55	1.28	1.05	1.39	1.39
28-28.9	1.58	1.58	.....	.....	1.58	1.58	1.17	1.54	1.32	1.66	1.66	1.35	.....	1.46	1.46
29-29.9	1.64	.....	.....	.....	1.64	1.64	1.21	1.62	1.40	1.77	1.77	1.42	.....	1.53	1.53
30-30.9	1.70	.....	.....	.....	1.70	1.70	1.25	1.70	1.48	1.88	1.88	1.49	.....	1.60	1.60
31-31.9	1.76	.....	.....	.....	.....	1.76	.....	.....	1.60	1.99	1.99	1.56	.....	.....	1.67
32-32.9	1.84	.....	.....	.....	.....	1.84	.....	.....	1.72	2.10	2.10	1.63	.....	.....	1.73
33-33.9	.....	.....	.....	.....	.....	1.92	.....	.....	1.84	2.21	2.21	1.70	.....	.....	1.79
34-34.9	.....	.....	.....	.....	.....	2.00	.....	.....	1.96	.....	2.32	1.77	.....	.....	1.85
35-35.9	.....	.....	.....	.....	.....	2.08	.....	.....	2.08	.....	.....	1.84	.....	.....	1.92
36-36.9	.....	.....	.....	.....	.....	2.16	.....	.....	2.16	.....	.....	.....	.....		
37-37.9	.....	.....	.....	.....	.....	2.24	.....	.....	2.24	.....	.....	.....	.....		
38-38.9	.....	.....	.....	.....	.....	2.34	.....	.....	2.34	.....	.....	.....	.....		
39-39.9	.....	.....	.....	.....	.....	2.44	.....	.....	2.44	.....	.....	.....	.....		
40-40.9	.....	.....	.....	.....	.....	2.54	.....	.....	.....	.....	.....	.....	.....		
41-41.9	.....	.....	.....	.....	.....	2.64	.....	.....	.....	.....	.....	.....	.....		
42-42.9	.....	.....	.....	.....	.....	2.74	.....	.....	.....	.....	.....	.....	.....		

*Union Oil Co. also purchases Long Beach crude and is maintaining the same gravity and price schedule in that field as the Standard maintains in Signal Hill and Huntington Beach fields. The Union also buys and pays the same prices as the Standard in the Rosecrans-Dominguez fields, on gravities ranging from 14 degrees to and including 24.9 degrees; and in Santa Fe Springs, on gravities ranging from 20 to and including 23.9 degrees.

REFINERS' and COMPOUNDERS' SUPPLIES

Following are the average market prices for the week on materials used by refiners and compounders f. o. b. shipping point as effective this date.

Refiners' Supplies

	June 7	May 31
Soda Ash light 58% bags.cwt.	-$1.38	-$1.38
Silicate of Soda 60 deg. drums.....cwt.	- 1.65	- 1.65
Sal Soda wks.....1.10-	1.25	1.10- 1.25
Caustic Soda 70% solid..cwt.	- 3.10	- 3.10
Chloride of Lime.....cwt. works.....	- 2.00	- 2.00
Sulphuric Acid 60 deg. tank cars f. o. b. shipping point.....per ton	10.50-11.00	10.50-11.00
Liquid Chlorine tank cars works.....lb.	- .04	- .04

Compounders' Supplies (Open Market)

Vegetable Oils—		
Linseed carloads spot.....lb.	10.7	10.8
June.....	10.7	10.8
Tanks, spot.....	09.7	09.8
Boiled carloads spot.....lb.	09.8	09.9
*Soya Bean spot, Bbls....lb.	15¾	15¾
Animal Oils—		
English Degras.....lb.	.05½	-.05½
Domestic Degras, bbls., carloads.....lb.	-.04¾	-.04¾
*Horse.....lb.	-.09½	-.09½
Oleic Acid—		
Dist. Bbls.....lb..09¾	-.10¼ .10	-.10½
Saponified Bbls.....lb..11	-.11½ .10½	-.11
Castor Oil—		
No. 1 Carlots, Bbls.....	-.12¾	-.12¾
No. 3 Carlots, Bbls.....	-.12¼	-.12¼
Lard Oils—		
Prime		
Winter Strained. to 1½ffa.40/45c.t.lb.	.18¼	.18¼
Extra		
Winter Strained. 2 to 4½ffa.40/45c.t.lb.	.15	.15
Extra..... 4 to 5 ffa.40/45c.t.lb.	.13½	.13
Extra No.1 7 to 10 ffa.40/50c.t.lb.	.12½	.12½
No. 1.....15 to 18 ffa.40/45c.t.lb.	.12¾	.12¾
No. 2.....22 to 23 ffa.40/45c.t.lb.	.12	.12
Prime Edible Tallow under 1¾ffa. 40/45c.t.N.Y.....lb..	-10	.09¼-.09½
Tallow acidless.....lb.	-.12	-.12
Lard Stearine.....lb.	nominal	nominal
Oleo Stearine.....lb.	-.13	-.13
Neatsfoot Oil—		
Pure.....bbls.-lb.		.16¼ .16¼
Extra.....do lb.		.12¼ .12½
No. 1.....bbls.-lb.		.12¾ .12¾
Cold pressed.....lb.		.19½ .18¾
Fish Oils—		
Menhaden Oil		
Light pressed.....gal.	-.65	-.65
White.....gal.	-.67	-.67
Yellow bleached.....gal.	-.70	-.70
*Herring tank cars coast.....gal.	-.50	-.50
Whale, extra winter bleached.....gal.	-.82	-.82
Seal.....gal.		nominal
Naval Stores—		
Turpentine, N. Y.....gal.	.86	.86½
Turpentine†.....gal.	.80	.79¾
Rosin, B. N. Y.....bbl.	10.00	9.80
Rosin, F. N. Y.....bbl.	12.30	12.25
Rosin, B†.....bbl.	8.50	8.30
Rosin, F†.....bbl.	10.80	10.75
Rosin Oil 1st run.....gal.	.60	.59
Rosin Oil 2nd run.....gal.	.65	.64
Pine Tar—		
Kiln Burnt.....bbl.	14.50	14.50
Retort.....bbl.	15.50	15.50
Alcohol—Denatured		
Formula 5		
Bbls.....gal.	.34	-34
Drums.....gal.	-28	-28

†Savannah, Ga. market.
*Nominal.

Sulfuric Acid Stronger; Caustic Soda Weaker

NEW YORK, June 7.—Following is a review of the markets for oils and supplies used in compounding and refining:—

Alcohol steady. More buying in denatured. Offerings smaller. Consumption is larger than expected. Stocks reduced. Wood alcohol quiet, but very firm.

Linseed Oil demand spasmodic. Generally disappointing. Paint makers buying hand-to-mouth. Flaxseed trend uncertain and irregular. Paint and linoleum makers disinterested in futures. Soya bean oil quiet but steadier.

Animal Oils steadier. Demand for pure neatsfoot oil slightly more active. Domestic degras marking time. English offered more freely. Horse oil trifle easier as buyers hold off. Oleo stearine is quiet. Demand chiefly for immediate requirements. Tallow oil dull. Lard stearine marking time.

Fish Oils dull. New crop crude menhaden oil not offered yet. Light pressed menhaden oil steady, but quiet 65 cents, gallon, in barrels. Whale oil demand lighter. Domestic cod oil marking time 58 to 60 cents, gallon, barrels.

Soda Ash slightly easier. Offerings more liberal but no price changes announced. Buying lighter.

Sal Soda weakening. Buyers holding off. Stocks large. No price shading reported.

Caustic Soda also weaker. Export demand negligible while stocks accumulate. Domestic buying light.

Sulfuric Acid still strengthening. Big buyers operating on large scale. Prices tending higher.

California Markets Little Changed

LOS ANGELES, June 4.—There has been no noteworthy change in the Los Angeles oil market in the last week. Some refiners have been disappointed over the slow rate of increase in gasoline consumption but this has steadily advanced and promises to reach record proportions before the end of summer. Export shipments and shipments to the east coast of gasoline have held up well. Fuel oil is strong. Lubes are moving favorably as to volume. Kerosene is soft. Casinghead has regained some of its former strength as the market leader.

Gulf Lubes More Active

HOUSTON, June 5.—Increasing inquiries and somewhat better demand are reported for Gulf Coastal lubes. Prices are unchanged although some companies are still shading prices for competitive business. Most manufacturers, however, are holding firmly to their quotations in expectation of stronger markets soon.

Benzol Advance Expected

NEW YORK, June 7.—Consumption of motor benzol soared sharply last week, which was attributed to the improved weather conditions. Spot motor benzol in tank cars, at the ovens, is still quoted at 24 cents a gallon. However, leading marketers look for an advance in price with the next gasoline tank wagon raise.

Jobbing demand for benzol is more active while motor fuel mixture makers are taking large quantities on contract. Stocks on spot are very light. Export demand for motor benzol is more active. Pure and 90 per cent benzol is quiet and unchanged.

Prairie Shipments

TULSA, June 5.—During May shipments of the Prairie Pipe Line Co. averaged 146,525 barrels daily, an increase of 2,093 barrels over the daily average recorded in April. May shipments totaled 4,542,260 barrels, as compared with 4,332,972 barrels in April, an increase of 209,288 barrels. Although daily average in May showed an increase over April, it is still short of the figure attained in March, when the company shipped 148,001 barrels daily through its lines.

Prairie Pipe Line Co. shipments for the past six months have been as follows:—

Month	Shipments	Daily Average
December, 1925 ...	4,182,026	134,904
January, 1926	4,187,390	135,077
February	4,071,405	145,407
March	4,588,038	148,001
April	4,332,972	144,432
May	4,542,260	146,525

Eastern and Central Kentucky Markets

ASHLAND and LEXINGTON KY., June 7. — Gasoline quotations have dropped from ¼ to ½c during the past week. Shipments have increased and refiners report business conditions very satisfactory. Kerosene remains scarce with quotations ½c. less than previous week. Fuel and gas oil are steady. Today's prices are:—

	Eastern	Central
58-60 gasoline	14½	13¾
60-62 gasoline	14¾	14¼
64-66 gasoline	15	14¾
68-70 gasoline	15¼	....
41-43 w.w. kerosene	12	11½
24-26 fuel oil	5⅛	....
Gas oil	6¼	6

OIL STOCKS AND FINANCES

National Petroleum News

Earnings of Few Independents Gain Over Year Ago; Others Decline

Staff Special
CLEVELAND, June 5.

OUTCOME of operations of several Independent oil companies in the first quarter of 1926 were better than in the first three months of 1925 but a few companies have reported lower net earnings this year than last. Following is a summary of some quarterly reports:

Marland Oil Co.'s net profits amounted to slightly more this year than last, but per share earnings were lower this year amounting to $1.91 per share before federal taxes on 1,896,245 shares of capital stock outstanding compared with $2.19 a share on 1,649,961 shares last year. Consolidated income accounts of Marland for the quarters compare:

	1926	1925
Gross	$16,096,643	$16,039,305
Expenses	12,555,888	12,388,534
Net	$ 3,540,755	$ 3,650,771
Other income	1,934,188	1,816,508
Total income	$ 5,474,943	$ 5,467,279
Interest, etc.	7,682	352,778
Depreciation, depletion	1,555,915	1,080,995
Aband. leases	281,280	411,436
*Net income	$ 3,630,066	$ 3,622,070
Dividends	1,887,705	.....
*Surplus	$ 1,742,361	$ 3,622,070

*Before federal taxes.

Skelly Oil Co. increased its net earnings almost 50 per cent in the first quarter compared with first quarter of 1925. Net income after all charges and reserves except federal taxes, was equal to $1.34 on the $25 stock compared with 90 cents a share last year. Concerning the report for the quarter W. G. Skelly, president, said:

"While the report is very satisfactory, much larger earnings are indicated during the second quarter. Refined prices are higher and the trend is decidedly upward. There is a more active demand for gasoline and other refined products than is customary at this season.

Comparative income accounts of Skelly for the two quarters follow:

	1926	1925
Gross Earnings	$5,420,584	$3,948,370
Operating expenses	2,776,587	1,891,354
Net earnings	$2,643,997	$2,057,016
Interest, disc.	162,654	256,266
Deprec., deplet.	1,183,051	1,050,616
*Net income	$1,298,292	$ 750,134

*Before federal income taxes.

Texas Pacific Coal & Oil Co. increased its income in the first quarter before deductions for depletion, depreciation, and federal taxes 57 per cent over earnings in first quarter of 1925. Income accounts compare:

	1926	1925
Gross	$1,729,757	$1,313,799
Expenses	1,029,680	823,448
Operating profit	$700,077	$490,351
Other income	120,790	44,190
Total income	$820,867	$534,541
Deductions	46,345	41,415
*Net income	$774,522	$493,126

*Before depreciation and depletion.

Income of Simms Petroleum Co. fell from $1.30 a share on 684,961 shares in the first quarter of 1925 to 18 cents a share on 685,941 shares in 1926. Crude oil production declined from a total of 1,255,465 barrels in the first three months last year to 827,724 barrels this year. Average daily production fell from 13,750 to 9,197 barrels. Daily average throughout at its Clayton refinery, acquired within the last year, was 3,981 barrels during the first quarter of 1926.

Condensed consolidated income account of Simms and subsidiaries for the two first quarters compare:

	1926	1925
Gross operating revenue	$1,689,365	$2,593,394
Operating expense	761,339	585,003
Gross profit	$ 928,026	$1,938,391
Other income	30,375	74,932
Total income	$ 958,401	$2,013,323
Interest, rentals, etc.	69,187	51,493
Federal income tax		100,000
Development expense	255,752	409,393
Deprec., deplet.	507,733	427,497
Net income	$ 125,728	$1,024,941

Mid-Continent Petroleum Corp. income before depreciation, depletion and estimated federal taxes was less in the first quarter of 1926 than the first quarter of 1925. Condensed consolidated income accounts compare:

	1926	1925
Operating profit	$3,624,282	$4,068,874
Dry holes & aband. wells	178,340	202,247
Interest, etc.	231,682	171,737
*Net inc.	$2,854,259	$3,694,890

*Before depreciation, depletion and federal taxes.

Net income of Pennock Oil Corp. slumped from $456,547, in the first quarter of 1925 to $97,253 in the first quarter of 1926, and net per share after all charges including estimated federal income tax fell from $3.04 per no par share to 65 cents per share. Income accounts for the two quarters compare:

	1926	1925
Gross income	$264,462	$936,198
Operating expense	80,386	131,568
Operating income	$184,076	$804,630
Gas, miscel. sales	25,314	31,730
Interest, discounts	9,793	6,937
Total income	$219,183	$843,317
Interest on notes	10,711	33,750
Deprec. deplet. & federal tax	111,220	353,020
Net income	$ 97,253	$456,547
Dividends	75,000	56,250
Surplus	$ 22,253	$400,297

Louisiana Oil Refining Corp. more than tripled its net earnings in the first quarter of 1926 over first quarter of 1925, before depreciation, depletion and other charges. Net earnings this year after all charges except federal taxes were equivalent to 17 cents on 1,140,063 no par common shares after payments of dividends on preferred stock. Condensed income accounts for the two quarters compare:

	1926	1925
Net operating earnings	$563,710	$240,844
Deductions	42,192	45,517
Interest paid	70,315	66,148
Net earnings	$451,203	$129,180
Depletion—of cost	63,680	*.....
Depletion—of appreciation	209,399	*.....
Depreciation	198,138	*.....
Drilling labor, expense	57,254	*.....
Amortization	45,267	*.....
Balance	53,085	*.....
Add— realized appreciation	209,399	*.....
Net income	$262,484	$129,180

*Figures not reported.

Panhandle Producing & Refining Co. reports deficit of $32,870 for first quarter compared with profit of $182,923 in first quarter of 1925. Comparatively consolidated income accounts follow:

	1926	1925
Operating rev.	$1,086,239	$1,312,224
Exp. & tax	1,024,477	1,107,350
Oper. income	$61,762	$ 204,874
Other income	†33,069	1,283
Gross inc.	$94,831	$206,157
Deductions	25,692	23,234
Deprec., deplet	102,009	.....
Deficit	$ 32,870	‡$ 182,923
Pfd. div. res.		*47,204
Deficit	$ 32,870	§$135,719

*Reserve for unpaid dividends. ‡Profit. †Includes gain of $20,389 in crude oil inventories, and $10,529 net income of Panhandle Oil Co. §Surplus available for reserves.

(Continued on Page 127)

Transactions In Oil Shares on New York Stock Exchange

1925 High	1925 Low	1926 High	1926 Low		Listed Capital	Par Value	Stocks	Div. Rate	Last Paid	Transactions week ended June 5 Sales	First	High	Low	Last	Ch'ge
....	.....	29¼	24¼	(sh)	713,000	N.P.	Amerada Corp	40cQ	Apr. 30, 26	20,600	27⅞	29¼	27⅜	28	+ ⅜
79¾	48	74	63	(sh)	200,000	N.P.	American Republics	.....	.....	100	65	65	65	65	0
47¼	32	59½	44¾	$	56,000,000	$25	Associated Oil	50cQ	Apr. 26, 26	800	55	55	55	55	0
117¼	95½	128¾	97		50,000,000	100	Atlantic Refining	.....	June 16, 24	18,700	124	124	116½	118¾	—3½
117¾	113¼	117½	115¼		20,000,000	100	do pfd	$1¾Q	May 1, 26	100	116¾	116¾	116¾	116¾	— ½
33½	18¾	33½	23¾		25,000,000	25	Barnsdall Corp. A	50cQ	Apr. 2, 26	6,000	26¾	26¾	25¾	26	— ⅝
30	16	29½	23¼		3,713,275	25	do B	50cQ	Apr. 2, 26	100	25	25	25	25	0
34⅜	23⅞	38⅛	30⅝	$	45,040,125	$25	California Petroleum	50cQ	June 1, 26	10,900	33¼	33¼	32¼	32¼	— ¾
70	42½	78	50		25,542,500	100	General Asphalt	.....	.....	40,100	67	70⅜	66	68¾	+1¼
109	86½	114¾	94⅞		7,416,000	100	do pfd	$1¾Q	Jnne 1, 26	1,600	107	110½	107	110½	+3
59⅜	42	67½	49½		29,429,550	25	General Petroleum	75cQ	June 1, 26	19,600	65½	67½	64	64	—1
85	59	72	50¼		25,000,000	100	Houston Oil	.....	.....	4,100	61⅞	63½	61½	62½	+ ½
41¾	13½	34	19¾	(sh)	500,000	N.P.	Independent Oil & Gas	25cQ	Apr. 12, 26	9,000	25¾	26	24½	24¾	— ⅜
14¼	5½	15¾	9	$	3,204,590	$10	Indian Refining	.....	Dec. 15, 20	3,900	10½	10¾	9⅜	10½	+ ½
12⅝	6	12½	8		4,545,860	10	do ctfs	.....	.....	200	9	9	9	9	0
110	77	104	90¼		2,296,400	100	do pfd	.....	Dec. 15, 21	100	91⅛	91⅛	19⅛	91⅛	+1⅛
1½	¾	¾	¼		1,678,760	10	Kansas & Gulf	.....	.....	100	⅜	⅜	⅜	⅜	⅜
.....	.....	23⅞	19¾	(sh)	4,000,000	N.P.	Lago Oil & Transport	.....	.....	112,900	22⅞	23⅞	22⅝	23¾	+ ¾
23¾	13⅝	19⅝	12	(sh)	1,131,216	N.P.	Louisiana Oil Refining	.....	.....	9,000	17⅜	17⅜	15⅞	16	—1
35⅛	20⅜	28⅞	20¾	(sh)	330,000	N.P.	Maracaibo Oil	.....	.....	2,400	22⅞	23½	22¼	23	+ ½
60½	32⅜	60¼	49¼	(sh)	1,895,823	N.P.	Marland Oil Co	$1Q	Mar. 31, 26	70,100	58⅛	58⅜	57¼	57⅜	— ⅛
250	225	.....	.....	$	45,942,800	$100	Mexican Petroleum	$5Q	Apr. 20, 26	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....		12,000,000	100	do pfd	$2Q	Apr. 20, 26	.....	.....	.....	.....	.....	.....
22½	29	12¾	6	(sh)	945,939	N.P.	Mexican Seaboard	.....	Nov. 15, 24	1,200	8	8	7½	7⅝	— ⅛
38	25¾	37	28	(sh)	1,357,800	N.P.	Mid-Continent Petroleum	.....	Aug. 1, 23	17,600	32½	33¼	31¾	31¾	—1⅛
94¾	83	100	90	$	6,718,000	$100	do pfd	$1¾Q	June 1, 26	100	99	99	99	99	—1
3¼	⅝	2½	1¼		25,415,540	10	Middle States	.....	July 1, 23	3,100	1⅜	1½	1⅜	1½	0
1½	1½	1⅜	⅞		4,384,680	....	do ctfs	.....	.....	1,000	⅞	⅞	⅞	⅞	0
78½	51⅜	83¼	51	(sh)	3,500,000	N.P.	Pacific Oil	$1.50S.A.	Jan. 20, 26	5,800	51⅜	51½	51⅜	51⅜	— ⅜
85⅜	59½	76½	56⅛	$	48,307,400	$50	Pan American P. & T.	$1.50Q	Apr. 20, 26	2,700	70¼	70¼	68¾	69½	— ½
84½	60⅜	78⅜	56⅞		91,025,100	50	do B	$1.50Q	Apr. 20, 26	43,300	71⅞	72	70	70¼	—1½
49¾	37¼	46	34	(sh)	400,000	N.P.	Pan American Western B	50cQ	Apr. 30, 26	2,900	38½	38½	37⅜	37⅜	—1⅜
6¼	2¼	20½	4½	(sh)	198,770	N.P.	Panhandle P. & R	.....	.....	17,100	19¾	20¼	17¼	18¾	— ¾
60½	37	90	51	$	2,935,200	$100	do pfd	.....	July 2, 23	200	86	86⅛	86	86⅛	+ ⅛
47⅛	36¼	48⅝	40	(sh)	2,406,692	N.P.	Phillips Petroleum	75cQ	Apr. 1, 26	26,900	46⅜	46⅜	45¼	45¼	—1
3½	1¼	1⅞	¾	$	29,622,925	$25	Pierce Oil Corp	.....	.....	1,400	¾	1	¾	1	+ ⅛
40	20¾	27⅛	17		15,000,000	100	do pfd	.....	Feb. 1, 22	.....	.....	.....	.....	.....	.....
8¼	4½	7	3⅜	(sh)	2,500,000	N.P.	Pierce Petroleum	.....	.....	2,100	4⅛	4⅜	4⅛	4¼	+ ¼
32⅝	12½	17½	11	$	11,467,850	$50	Producers & Refiners	.....	Sept. 15, 23	1,400	14	14⅜	13½	13⅝	—1¼
47⅝	27	35	30¾		2,845,350	50	do pfd	.....	May 1, 25	100	35	35	35	35	— ⅛
33¾	25⅛	31	25¾		75,959,250	25	Pure Oil Co	37½cQ	June 1, 26	15,400	28⅜	28⅜	27⅝	27¾	— ½
108½	103	111¼	106		13,000,000	100	do 8% pfd	$2Q	Apr. 1, 26	.....	.....	.....	.....	.....	.....
57⅜	48¼	57⅜	50	(sh)	691,922	13.40	Royal Dutch, N. Y. shares	$1.339	Jan. 29, 26	3,400	53½	53¾	53	53⅜	+ ⅛
49	39½	48⅝	41	(sh)	93,345	£2	Shell Transport & T	96⅛c	Jan. 22, 26	1,300	44⅝	45⅛	44⅝	45	0
28⅜	21⅝	28⅛	24	(sh)	10,000,000	N.P.	Shell Union Oil	35cQ	Mar. 31 26	10,600	26⅛	26¼	x25¼	25¼	— ½
106½	99½	107	103	$	20,000,000	$100	do pfd	$1½Q	May 15, 26	300	106	107	106	106⅞	+ ⅛
28½	17¾	28⅝	18		7,207,620	10	Simms Petroleum	50cS.A.	Jan. 2, 26	5,700	20⅜	20⅜	19¼	19½	— ⅜
24⅞	17	24⅞	19⅜	(sh)	4,489,887	N.P.	Sinclair Consolidated	.....	May 31, 24	29,900	23	23⅛	21⅞	22⅛	— ¾
94⅛	78¾	97	90	$	17,852,200	$100	do pfd	$2Q	May 15, 26	700	96	97	95¾	97	+ ½
32½	21¾	35⅛	26⅝		23,988,590	25	Skelly Oil Co	50cQ	June 15, 26	20,400	34⅞	35	33⅞	34	— ⅛
67¼	51⅜	62¼	52½		237,910,850	25	S. O. California	50cQ	Mar. 15, 26	.....	.....	.....	.....	.....	.....
.....	.....	59⅜	52⅝	(sh)	13,016,434	N.P.	S.O. California (new)	50cQ	June 15, 26	19,400	59	59	57¾	58	— ⅜
47½	38⅜	46⅜	40¼		515,109,675	25	S. O. New Jersey	25cQ	June 15, 26	38,100	45	45⅜	44	44	— ⅛
119	116¼	119⅛	116¼		199,972,900	100	do pfd	$1¾Q	June 15, 26	1,000	117¾	117¾	117⅛	117⅛	—1¼
43⅞	38⅛	41⅝	30⅜	(sh)	1,103,931	N.P.	Sun Oil	25cQ	June 15, 26	300	33½	33½	33¼	33¼	— ¼
6⅛	2	4¼	2	(sh)	1,121,368	N.P.	Superior Oil Corp	.....	Dec. 20, 20	500	2½	2½	2⅜	2⅜	0
55	42¾	54⅜	48	$	164,450,000	$25	The Texas Co	75cQ	Mar. 31, 26	65,900	53½	54⅜	x53⅛	53	— ⅛
23¾	10⅞	19½	12⅛		8,380,340	10	Texas Pacific Coal & Oil	.....	June 30, 23	4,600	14¾	15⅛	14⅝	14⅝	0
36⅞	30¼	39¼	30¼	(sh)	2,137,570	N.P.	Tide Water Oil Co	37½c	Mar. 31, 26	3,400	34⅜	34⅜	34	34	— ⅜
101	99	103	90	$	20,672,900	$100	do 5% pfd	$1.25Q	May 15, 26	600	93⅞	94	93¾	94	+ ¼
5⅞	3½	4¾	3	(sh)	3,742,029	N.P.	Transcontinental Oil	.....	.....	11,500	3¾	4	3¾	3⅞	+ ⅛
45⅜	33	49⅜	37¼	$	40,480,800	$25	Union Oil of California	50cQ	May 10, 26	7,100	44¾	45¼	43⅜	43¾	—1¼
134	96¼	94	80		24,423,300	100	Union Tank Car Co	$1½Q	June 1. 26	300	93	93⅞	93	93⅞	+ ⅜
117⅛	113¼	116½	113¼		12,000,000	100	do pfd	$1¾Q	June 1 26	300	114	114	114	114	+ ¾
31¾	25½	29¼	25⅛	(sh)	490,000	N.P.	White Eagle Oil & Refining	50cQ	Apr 20, 26	2,400	27⅝	28	27½	27⅝	— ¼

*New High †New Low xEx-dividend Total Sales 700,400

Pittsburgh Stock Exchange

1925 High	1925 Low	1926 High	1926 Low	Par Value	Stocks	Transactions Week Ended June 4 Sales	First	High	Low	Last	Ch'ge
.....	.....	6¾	6¾	N.P.	Andes Petroleum	.....	.....	.....	.....	.....	.....
8¾	5¾	7	5¾	$10	Arkansas Nat. Gas	1,365	6⅜	6¼	6	6⅛	0
78¾	69¼	.....	.....	N.P.	Columbia Gas	.....	.....	.....	.....	.....	.....
18	14½	17	12½	$10	Devonian Oil	10	14½	14½	14½	14½	+ ½
112¾	105¾	115	112	$100	DuquesneLt.7%pfd.	10	114	114	114	114	0
95	90	.....	.....	100	Fayette County Gas	.....	.....	.....	.....	.....	.....
.....	.....	10	5¼	N.P.	HoustonGulfGas(w.i.)	510	9	9	8¼	8¼	—1¼
.....	.....	83½	80	25	Lone Star Gas Corp.	3,029	31⅜	32¾	31⅛	32¾	+1¾
37¼	31	36½	33⅛	25	Ohio Fuel Corp	5,220	35⅞	36½	35⅞	36½	+ ⅝
34	26	34	28	25	Oklahoma Nat. Gas	155	29⅞	30	29⅞	30	+ ⅛
8¾	5	5¾	4¼	5	Pittsburgh O. & G	100	4½	4½	4½	4½	— ¼
9¾	6	10	8	10	Salt Creek Cons	670	8½	9½	8½	9¼	+ ⅛
13¾	8½	10	8½	10	Tidal Osage	1,100	8½	8½	8½	8½	0

Pittsburgh Curb Market

1925 High	1925 Low	1926 High	1926 Low	Par Value	Stocks	Transactions Week Ended June 4 Sales	First	High	Low	Last	Ch'ge
2½	.60	3¾	2⅛	$ 5	Colombia Synd	.....	.....	.....	.....	.....	.....
.60	.15	15	15	5	Duquesne Oil	.....	.....	.....	.....	.....	.....
9	5½	.....	.....	10	Forest Oil	.....	.....	.....	.....	.....	.....
92¾	64	91½	85	25	Gulf Oil Corp	.....	.....	.....	.....	.....	.....
12½	8¼	12	7½	N.P.	Leonard Oil & Dvlp	.....	.....	.....	.....	.....	.....
.....	.....	1⅝	1⅛	N.P.	Mountain & Gulf	.....	.....	.....	.....	.....	.....
2¾	1⅜	.....	.....	1	Oklahoma Eastern	.....	.....	.....	.....	.....	.....
.47	.20	.20	.15	10	Omar O. & G	.....	.....	.....	.....	.....	.....
.....	.....	2	1¾	5	Pittsburgh Oil Dev	.....	.....	.....	.....	.....	.....
27½	25	33	26	10	Plymouth Oil	2,163	30¾	33	30¾	32½	+1½
7	3	5½	3	5	States Oil	.....	.....	.....	.....	.....	.....
4	1⅞	3⅝	2⅛	$ 1	Texon Oil & Land	4,455	2 11/16	3	2 11/16	3	+ 1/16
11	9	9½	8	10	Tidal Osage	100	8	8	8	8	0
.....	.....	42⅝	41	N.P.	Waverly Oil Wks. A	.....	.....	.....	.....	.....	.....

*New High ‡New Low xEx.Dividend

NEW YORK CURB BONDS

Week Ending June 4

	High	Low	Last	Ch'ge
Atl. Gulf & W I 5s '59	69½	68½	69	0
Cities Serv. 6s '66	93⅛	92⅝	93⅛	+ ⅛
Cities Serv. 7s "D" '66	104¾	104½	104½	0
Cities Serv. 8s "E" '66	109⅝	109⅝	109⅝	+ ⅛
Galena S O 7s	90⅜	88⅛	90⅝	+3⅞
General Pet. 6s '28	101⅜	101½	101⅜	+ ⅛
Gulf Oil 5s '37	100¾	100¼	100¼	— ½
Indepen. Oil 6½s '31	99	98¾	99	+ ½
Pan Amer Pet. 6s '40	100¾	100	100⅝	+ ⅛
Pure Oil 6½s '33	103⅜	103¼	103¼	+ ¼
S O N Y 6½s '33	106½	106¼	106½	0
Sun Oil 5½s '39	100	99¾	99¾	— ¼
Tidal Osage 7s '34	104	103¾	104	+ ¼
Trans. Cont. Oil 7s '30	92½	92½	92½	0
Vacuum Oil 7s	.....	.....	.....	.....
Valvoline 7s	.....	.....	.....	.....

NEW YORK BONDS

	High	Low	Last	Ch'ge
Amer. Rep. Cor. Deb. 6s	100	99⅞	99⅞	0
Associated Oil gold 6s	103	102¾	102⅞	— ⅛
Atlantic Rfg. deb 5s	102¾	102¼	102¾	+ ¼
Barnsdall Corp. 6s	100	99¾	100	0
Cal. Petrol sf 6½s	103⅞	103½	103⅞	+ ⅜
Empire Gas & Fuel 7½s	102	101⅜	102	0
Empire Gas & Fuel 6½s	97⅝	97½	97½	— ⅛
Gen. Asphalt 6s	105½	105½	105½	+ ½
Gen. Pet. 5s	100¾	100¼	100½	+ ⅛
Humble Oil & Rfg. 5½s	103	102⅜	102⅝	+ ⅛
Mid-Cont. Pet. 6½s	104⅞	104¼	104½	+1
Pan-Amer. P. & T. 7s	106	106	106	— ½
Pan-Amer. P. & T. 6s	108¾	107⅞	108	— ¾
Pierce Oil deb 8s	106½	106⅜	106⅜	0
Prod. & Refnrs. 8s	111⅛	111	111	— ¼
Sinclair Con. Oil Col. 7s	98	97¾	97⅞	0
Sinclair Con. Oil con. 6½s	94	93⅜	93⅜	— ½
Sinclair Con. Oil 6s	108	106⅝	106⅞	—1⅛
Sinclair Crude Oil 6s	101⅛	101	101	0
Sinclair Pipe Line sf 5s	91½	91	91⅛	0
Skelly Oil 6½s	140	136½	136½	—4
Superior Oil 7s	95	95	95	0
Union Oil of Cal. 6s-A	107¼	106¾	107¼	+ ¼
Union Oil of Cal. 5s-C	98¾	98¼	98¼	0

Standard Oil Stock Traded in New York Curb Market

1925 High	1925 Low	1926 High	1926 Low		Outstanding Capital	Par Value	Stocks	Div. Rate	Last Paid	Transactions week ended June 4 Sales	First	High	Low	Last	Ch'ge
£6¾	17¼	19¼	16⅜	£	4,000,000	£1	Anglo American	60¾cS.A.	May 27, 26	3,700	18¼	18¼	18⅛	18⅛	+ ¼
4¼	1⅜	2¼	1½	(sh)	500,000	N.P.	Atlantic Lobos	.....	.....	400	1½	1½	1½	1½	— ⅛
12¾	3	4½	3¼	$	10,000,000	$10	do pfd	.....	.....	.....	.....	.....	.....	.....	.....
£40	203	255	£26		1,000,000	100	Borne Scrymser	‡84S.A.	Apr. 15, 26	.....	.....	.....	.....	.....	.....
72	53½	59½	49		10,000,000	50	Buckeye Pipe Line	$1Q	June 15, 26	750	49½	52½	49½	51¾	+2¼
74	48½	73¾	65		3,000,000	25	Chesebrough Mfg	75cQ	Mar. 31, 26	500	66½	68	66½	66½	+ ½
115	110	.....	.....		1,000,000	100	do pfd	$1¾Q	Mar. 31, 26	.....	.....	.....	.....	.....	.....
$1½	£1⅞	£5⅞	19½		$4,914,280	10	Continental Oil	£5cQ	June 15, 26	5,400	20⅞	20⅞	20⅝	20⅝	— ¼
17⅜	10	16	13½		1,500,000	25	Crescent Pipe Line	.....	Sept. 15, 23	100	14	14	14	14	0
150	132	137	108		3,000,000	100	Cumberland Pipe Line	$3Q	June 15, 26	50	108	112	108	110	+2
96	61	63¾	47¾		5,000,000	100	Eureka Pipe Line	$1Q	May 1, 26	.....	.....	.....	.....	.....	.....
68½	23¼	32½	17		16,000,000	100	Galena Signal Oil	.....	June 30, 25	300	22	22½	20	20	— ¼
105	88	94½	70		4,000,000	100	do new pfd	$2Q	Mar. 31, 26	40	75	75¼	75	75	+1
114	95	97¾	70		2,000,000	100	do old pfd	$2Q	Mar. 31, 26	120	75	76	75	76	+2¾
95	42¾	68¼	53½		72,916,650	25	Humble Oil & Refining	30cQ	Apr. 1, 26	11,200	67	67½	65⅛	65½	— ⅜
154½	127	144½	131		20,000,000	100	Illinois Pipe Line	$6S.A.	Dec. 31, 25	680	132¾	132¾	131	131½	—1½
39¼	27¼	38¾	31½	sh	6,491,852	N P	Imperial of Canada (new)	25cQ	June 1, 26	3,400	36¾	36¾	36	36⅛	— ¾
84	57⅛	70	58	$	5,000,000	50	Indiana Pipe Line	$1Q	May 15, 26	500	65½	67	65¼	67	+2
$53⅛	£2⅛	$5¼	£8¾	sh	7,118,138	N P	International Petroleum	25c	Feb. 15, 26	16,400	35	35¼	34	34	— ⅞
£5⅜	16½	£0⅝	14½	$	6,362,500	$12½	National Transit	25cS.A.	June 15, 26	800	15¼	15¼	14½	14½	—1⅜
79	49¼	51½	39		5,000,000	100	New York Transit	$1Q	Apr. 15, 26	400	48½	50	48½	50	+ ½
88	67½	80½	70¾		4,000,000	100	Northern Pipe Line	$8S.A.	Jan. 1, 26	200	74½	74½	74	74	— ¼
75¼	60¾	67¾	58		60,000,000	25	Ohio Oil Co	50cQ	Mar. 31, 26	1,300	60	60	x59⅛	59⅞	— ⅞
44½	19·	28	15		10,000,000	25	Penn Mex Fuel	50c	May 21, 25	400	18½	18½	18½	18½	0
65½	45⅞	60¼	48		60,000,000	25	Prairie Oil & Gas	50cQ	May 31, 26	8,900	55¼	55⅜	54	54	—1
129¾	106	127½	122½		81,000,000	100	Prairie Pipe Line	$2Q	Apr. 30, 26	600	125¾	125¾	124½	124½	— ½
£54	£00	£12	191		4,000,000	100	Solar Refining Co	$5S.A.	Dec. 19, 25	.....	.....	.....	.....	.....	.....
103	63	74½	61½		10,000,000	100	Southern Pipe Line Co	$1Q	Mar. 1, 26	.....	.....	.....	.....	.....	.....
197	139	197	15£		20,000,000	100	South Penn Oil Co	$1.50Q	Mar. 31, 26	.....	.....	.....	.....	.....	.....
47½	45	50	37		20,000,000	25	do new	.....	.....	500	38	38¼	38	38	0
84	50	56	49		3,500,000	100	South West Pa. Pipe Line	$1Q	Apr. 1, 26	.....	.....	.....	.....	.....	.....
70¾	59½	70½	61½	$	228,756,258	$25	S. O. Indiana	62½cQ	June 15, 26	6,200	65¼	65¼	64⅛	64⅛	— ⅝
46	30⅝	36½	25		8,000,000	25	S. O. Kansas	.....	June 16, 24	1,100	27⅜	27½	26⅝	26⅝	—1⅛
137	114¾	134⅜	108		16,864,434	25	S. O. Kentucky	$1Q	Mar. 1, 26	800	120¼	121	119¾	120	—1
£70	£31	£75	183		4,500,000	100	S. O. Nebraska	$5S.A.	Dec. 19, 25	.....	.....	.....	.....	.....	.....
.....	.....	51⅝	45½		4,518,000	25	do new w.i	.....	.....	1,700	50	50⅜	49	49½	— ½
48⅝	40¼	47¼	30⅜		227,535,300	25	S. O. New York	35cQ	June 15, 26	41,700	33⅛	33½	32⅝	32⅞	— ⅛
.....	.....	33¼	30¾		358,102,000	25	do new w.i	.....	.....	38,600	33¼	33¼	32½	32⅝	— ⅛
$69	338	$62	£02½		14,000,000	100	S. O. Ohio	$2½Q	Apr. 1, 26	£40	302	312	301	311	+10
123	116	120	117		7,000,000	100	do pfd	$1¾Q	June 1, 26	20	117¼	118	117¼	118	0
27	12	23	15½		1,722,931	25	Swan-Finch Co	.....	Nov. 1, 19	.....	.....	.....	.....	.....	.....
109½	80⅛	112	95¾		61,919,950	25	Vacuum Oil Co	50cQ	Mar. 20, 26	2,400	103	103½	102½	102½	— ½

New York Curb Market

1925 High	1925 Low	1926 High	1926 Low	Par Value	Stocks	Transactions week ended June 4 Sales	First	High	Low	Last	Ch'ge
11⅝	2¼	14½	5	....	Amer. Maracaibo	5,800	6⅜	6¾	6¼	6⅜	+ ⅛
8¾	5	6¾	5⅞	$10	Arkansas Nat. Gas	400	6	6⅛	6	6⅛	— ⅛
.....	.....	19¼	14⅜	N.P.	Beacon Oil	2,100	16¾	17¼	16¾	16¾	+ ¼
47⅜	38	.....	.....	$25	British-American	.....	.....	.....	.....	.....	.....
10¼	2¾	22⅜	9¼	25c	Carib. Syndicate	39,600	13¾	15¼	13⅝	14¾	+ ⅞
43	35	42⅜	37½	$20	Cities Service	7,600	40¾	41¼	40½	41¼	+ ½
85⅜	80¼	86½	82¾	100	do pfd	3,400	86¼	*86½	86⅛	86½	+ ⅛
8	7¼	7½	7¾	10	do pfd. B	100	7½	7½	7½	7½	+ ⅛
21¾	17¼	20¾	19	10	do bankers' sh	.....	.....	.....	.....	.....	.....
2¾	.60	3½	2	N.P.	Colombia Syndicate	10,800	2⅜	2⅛	2⅛	2⅛	— 1/16
15	8¼	15¼	10	N.P.	Creole Syndicate	9,200	13⅛	13¼	12¾	12¾	— ¼
12¼	5	7¾	1⅜	N.P.	Crown Central	100	1⅞	1⅞	1⅞	1⅞	0
7	2	3¾	2	N.P.	Derby Oil & Ref	.....	.....	.....	.....	.....	.....
27	10½	17½	13	N.P.	do pfd	1,000	15	15	15	15	+ ⅛
6	1¾	7¼	3⅜	N.P.	Gibson Oil	18,700	5¾	6	5⅝	5¾	— ⅛
3¾	1⅝	2	.63	N.P.	Gilliland v.t.c	.....	.....	.....	.....	.....	.....
98¼	63½	93¾	82	$25	Gulf Oil Corp	4,800	86⅞	88	86¾	86⅞	— ⅜
5⅞	2¼	4	2¼	N.P.	Kirby Petroleum	100	2¾	2¾	2¾	2¾	— ⅛
23¾	17⅞	25⅞	16¾	N.P.	Lago Oil & Trans. A	.....	.....	.....	.....	.....	.....
11¾	4⅛	13	8½	N.P.	Lago Petroleum	7,900	9¼	9¼	8⅞	8⅞	— ⅛
13	6	12¼	5¾	N.P.	Leonard Oil & Dev.	1,400	20¾	22⅜	20½	22⅜	+1⅞
25⅞	18	25¾	20	N.P.	Lion Oil Refining	.....	.....	.....	.....	.....	.....
4¼	1¾	2¾	2⅝	N.P.	Marland of Mexico	8,500	5⅛	5¼	5⅛	5¼	0
5¾	.56	5½	3¾	$10	Mexican-Panuco	300	1⅝	1⅝	1⅝	1⅝	0
2	1	1¾	1¾	1	Mountain & Gulf	5,200	25	25⅝	25	25⅜	+ ¼
26¼	18¾	26	23	10	Mountain Prod	2,000	6¼	6¼	6⅛	6¼	0
6¾	3¾	6¾	5⅞	5	New Bradford	.....	.....	.....	.....	.....	.....
24¾	16½	5½	2	10	New England Fuel	7,500	14½	14½	13	14	+ ⅜
193¾	6¾	17	9⅛	1	New Mex. & Ariz	200	11⅞	11⅞	11⅞	11⅞	—1
12¾	8¾	17	8	$5	New York Oil	.....	.....	.....	.....	.....	.....
37	14	36	34¼	$5	Ohio Fuel Corp	1,200	50	52	50	52	—3
2½	.90	2¾	.50	N.P.	Peer Oil Corp	300	19⅜	20	19⅜	19⅞	+ ¼
28¼	16	22¾	18½	$10	Pennok Oil	600	36	36	35½	35½	— ⅝
44½	16	38	14⅝	$5	Red Bank Oil	3,000	21½	22⅛	20⅝	21⅛	— ½
33⅜	19	24¾	14½	N.P.	Reiter-Foster	4,400	6½	7½	6½	7⅜	+ ⅝
9⅛	3½	7½	4⅝	N.P.	Ryan Consolidated	2,800	8⅜	9½	8⅝	9	+ ½
9¾	6¾	10	8	$10	Salt Creek Cons	3,000	31	31⅛	30¾	30¾	— ¼
$5	£4	$6	£87⅛	10	Salt Creek Prod	500	3¼	*3½	3¼	3½	0
3¾	1	3½	1¾	5	Savoy Oil	.....	.....	.....	.....	.....	.....
13¾	9	10	7⅝	10	Tidal Osage	200	8¼	8¾	8¼	8¼	0
10⅞	8	10	8¼	10	do non-voting	14,900	24½	25⅛	24½	25⅛	+ ⅝
.....	.....	27	21	N.P.	Tide Water Assoc	800	97⅝	97⅝	97½	97½	0
.....	.....	99¼	97½	100	" " " pfd	12,400	7¼	7¼	6¾	6¾	— ½
4⅜	1¾	8	4¼	5	Venezuelan Pet	9,200	20⅜	30⅛	28½	30⅛	+ ⅞
.....	.....	£9⅜	£3½	....	Warner-Quinlan w.i.	700	28½	28½	28	28	—1¼
81¼	£2¾	27½	22	N.P.	Wilcox O. & G. new	1,300	7¾	*7¾	7⅛	7¼	— ¼
7	3⅞	7¼	4⅜	N.P.	Woodley Petroleum						

*New High †New Low xEx-Dividend.

Cleveland Stock Market

June 4

	Par	Bid	Asked	Last Sale
Canfield Oil Co	$100	.....	.....	107
do pfd	100	.....	95	100
Fred G. Clark Co	10	2¾	.....	3¼
National Refining Co	25	37	39⅛	37¼
do pfd	100	128	135	129½
Paragon Refining Co	25	7⅞	8	8
do pfd	100	55	70	67

x—ex dividend.

Oil Dividends

	Amt.	Payable	Stock of Record
Associated Oil q	50c	July 24	June 25
do extra	40c	July 24	June 25
Cities Service m	½%	July 1	June 15
do stock m	½%	July 1	June 15
do pfd. m	½%	July 1	June 15
do pfd. B m	½%	July 1	June 15
N. Y. Transit q	$1.25	July 15	June 18
Pennok Oil q	50c	June 25	June 15
do q	50c	Sept. 25	Sept. 15
Salt Creek Cons. q	20c	July 1	June 15
Tide Water q	37½c	June 30	June 15
Tide Water-Associated q	30c	Aug. 2	June 10
do pfd. q	$1.50	July 1	June 10

Atlantic Buys Three Tankers

WASHINGTON, June 7.—The Atlantic Refining Co. has purchased from the United States Shipping Board the tankers Sharon, J. M. Connelly and Bessemer, each of 7057 deadweight tons, for $40,000 each, "as is" and "where is," for Diesel conversion. These tankers at present are laid up at Mobile, Ala.

(Continued from Page 124)

Net loss of Superior Oil Corp. in first quarter was $182,798 compared with loss of $123,877 in first quarter of 1925. Consolidated income accounts for the two quarters compare:

	1926	1925
Gross income	$225,687	$356,388
Expense & int.	231,270	227,373
Depreciation	102,956	132,256
Depletion	104,260	120,637
Net loss	$182,798	$123,877

Mexican Seaboard Oil Co. netted $106,666 after interest, drilling expense reserve, but before depletion in the first quarter of 1926 compared with net loss of $112,188 in corresponding quarter of 1925. Income accounts for the two quarters following:

	1926	1925
Gross income	$1,601,897	$2,292,610
Expenses	767,160	997,408
Net rev.	$ 834,737	$1,295,202
Other income	24,186	48,872
Total inc.	$ 858,923	$1,334,074
Interest	61,250	61,250
Drill. expenditures	651,764	1,158,077
*Reserves	39,243	236,935
Net inc.	$ 106,666	†$112,188

*For expenditure on inactive leases. †Before depletion. ‡Net loss.

Net income of the Arkansas Natural Gas Co. in the first quarter was $757,403 after charges compared with $644,943 in the first quarter of 1925.

Tidal Osage Oil Co. netted $111,742 in quarter ended March 31, compared with $85,093 in the first three months of 1925.

Financial Notes

Extra Dividends—Declared by North Pipe Line Co., Standard Oil Co. of Indiana, and Vacuum Oil Co.

Prairie Oil & Gas Co.—After lapse of three quarters, dividends have been resumed.

Standard Oil Co. of California.—13,016,434 shares of no par value listed on New York Stock Exchange. This is stock of company formed by merger of old Standard of California and Pacific Oil Co.

Chesebrough Mfg. Co.—All directors and officers re-elected.

Texon Oil & Land Co.—Directors and officers re-elected. O. L. Pickrell also added to board.

Tide Water Oil Co.—Francis I. Fallon elected to the board. Other directors re-elected and all officers re-elected.

Amerada Corp.—Murray Doan elected director. Other directors re-elected. Meeting called to act on change of name to Amerada Oil Corp. postponed until June 17.

Ohio Fuel Corp.—Three-fourths of outstanding stock of Fayette County Gas Co. has been deposited for exchange for Ohio Fuel Corp. stock.

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Miscellaneous

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Address Box 622
Care National Petroleum News

Central Producing & Refining Company's Property For Sale On
June 21, 1926, 2:00 P. M.

Refinery ready to operate at Bowling Green, Ky. Ten acres of land and all buildings situated thereon. Complete refining plant and outfit including tanks, eleven pumps, stills, boilers, agitator, loading racks, two sidings to railroad, office equipment and furniture, laboratory equipment, air compressor, all tools, and equipment in the machine shop, all equipment and fittings in warehouse, six Grimes pumps, 1 Lucey pump, 1 Snow pump, 1 National hot oil pump, 1-300 barrel gas knock down tank, 1-6000 horizontal tank, 1-2½x7 horizontal tank, 1-3x10 horizontal tank, 100 feet of 4 inch pipe, about four miles of pipe line running from the plant to the Indian Morgantown station, 1-250 barrel steel rivet tank and all other equipment. Assets to be sold at public auction on the premises. A real buy. For further information write or see M. M. Ennis, Bowling Green, Kentucky, or Frederick W. Howell, Miami Savings Building, Dayton, Ohio, Assignees.

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